Test Bank Ignatavicius Medical Surgical 9th 2017

Medical-Surgical Nursing (Miami Dade College)

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Chapter 01: Overview of Professional Nursing Concepts for Medical-Surgical Nursing

MULTIPLE CHOICE

1. A nurse wishes to provide client-centered care in all interactions. Which action by the nurse best demonstrates this concept?
a. Assesses for cultural influences affecting health care
b. Ensures that all the clients basic needs are met
c. Tells the client and family about all upcoming tests
d. Thoroughly orients the client and family to the room

ANS: A
Competency in client-focused care is demonstrated when the nurse focuses on communication, culture, respect, compassion, client education, and empowerment. By assessing the effect of the clients culture on health care, this nurse is practicing client-focused care. Providing for basic needs does not demonstrate this competence. Simply telling the client about all upcoming tests is not providing empowering education. Orienting the client and family to the room is an important safety measure, but not directly related to demonstrating client-centered care.

DIF: Understanding/Comprehension REF: 3
KEY: Patient-centered care| culture MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse is caring for a postoperative client on the surgical unit. The clients blood pressure was 142/76 mm Hg 30 minutes ago, and now is 88/50 mm Hg. What action by the nurse is best?
a. Call the Rapid Response Team.
b. Document and continue to monitor.
c. Notify the primary care provider.
d. Repeat blood pressure measurement in 15 minutes.

ANS: A
The purpose of the Rapid Response Team (RRT) is to intervene when clients are deteriorating before they suffer either respiratory or cardiac arrest. Since the client has manifested a significant change, the nurse should call the RRT. Changes in blood pressure, mental status, heart rate, and pain are particularly significant. Documentation is vital, but the nurse must do more than document. The primary care provider should be notified, but this is not the priority over calling the RRT. The clients blood pressure should be reassessed frequently, but the priority is getting the rapid care to the client.

DIF: Applying/Application REF: 3
KEY: Rapid Response Team (RRT)| medical emergencies
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is orienting a new client and family to the inpatient unit. What information does the nurse provide to help the client promote his or her own safety?
a. Encourage the client and family to be active partners.
b. Have the client monitor hand hygiene in caregivers.
c. Offer the family the opportunity to stay with the client.
d. Tell the client to always wear his or her armband.

ANS: A
Each action could be important for the client or family to perform. However, encouraging the client to be active in his or her health care as a partner is the most critical. The other actions are very limited in scope and do not provide the broad protection that being active and involved does.

DIF: Understanding/Comprehension REF: 3
KEY: Patient safety

MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A new nurse is working with a preceptor on an inpatient medical-surgical unit. The preceptor advises the student that which is the priority when working as a professional nurse?
a. Attending to holistic client needs
b. Ensuring client safety
c. Not making medication errors
d. Providing client-focused care

ANS: B
All actions are appropriate for the professional nurse. However, ensuring client safety is the priority. Up to 98,000 deaths result each year from errors in hospital care, according to the 2000 Institute of Medicine report. Many more clients have suffered injuries and less serious outcomes. Every nurse has the responsibility to guard the clients safety.

DIF: Understanding/Comprehension REF: 2
KEY: Patient safety
MSC: Integrated Process: Nursing Process: Intervention
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A client is going to be admitted for a scheduled surgical procedure. Which action does the nurse explain is the most important thing the client can do to protect against errors?
a. Bring a list of all medications and what they are for.
b. Keep the doctors phone number by the telephone.
c. Make sure all providers wash hands before entering the room.
d. Write down the name of each caregiver who comes in the room.

ANS: A
Medication errors are the most common type of health care mistake. The Joint Commissions Speak Up campaign encourages clients to help ensure their safety. One recommendation is for clients to know all their medications and why they take them. This will help prevent medication errors.

DIF: Applying/Application REF: 4
KEY: Speak Up campaign| patient safety MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

6. Which action by the nurse working with a client best demonstrates respect for autonomy?
a. Asks if the client has questions before signing a consent
b. Gives the client accurate information when questioned
c. Keeps the promises made to the client and family
d. Treats the client fairly compared to other clients

ANS: A
Autonomy is self-determination. The client should make decisions regarding care. When the nurse obtains a signature on the consent form, assessing if the client still has questions is vital, because without full information the client cannot practice autonomy. Giving accurate information is practicing with veracity. Keeping promises is upholding fidelity. Treating the client fairly is providing social justice.

DIF: Applying/Application REF: 4
KEY: Autonomy| ethical principles MSC: Integrated Process: Caring
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A student nurse asks the faculty to explain best practices when communicating with a person from the lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) community. What answer by the faculty is most accurate?
a. Avoid embarrassing the client by asking questions.
b. Dont make assumptions about their health needs.
c. Most LGBTQ people do not want to share information.

d. No differences exist in communicating with this population.

ANS: B
Many members of the LGBTQ community have faced discrimination from health care providers and may be reluctant to seek health care. The nurse should never make assumptions about the needs of members of this population. Rather, respectful questions are appropriate. If approached with sensitivity, the client with any health care need is more likely to answer honestly.

DIF: Understanding/Comprehension REF: 4
KEY: LGBTQ| diversity
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

8. A nurse is calling the on-call physician about a client who had a hysterectomy 2 days ago and has pain that is unrelieved by the prescribed narcotic pain medication. Which statement is part of the SBAR format for communication?
a. A: I would like you to order a different pain medication.
b. B: This client has allergies to morphine and codeine.
c. R: Dr. Smith doesnt like nonsteroidal anti-inflammatory meds.
d. S: This client had a vaginal hysterectomy 2 days ago.

ANS: B
SBAR is a recommended form of communication, and the acronym stands for Situation, Background, Assessment, and Recommendation. Appropriate background information includes allergies to medications the on-call physician might order. Situation describes what is happening right now that must be communicated; the clients surgery 2 days ago would be considered background. Assessment would include an analysis of the clients problem; asking for a different pain medication is a recommendation. Recommendation is a statement of what is needed or what outcome is desired; this information about the surgeons preference might be better placed in background.

DIF: Applying/Application REF: 5
KEY: SBAR| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse working on a cardiac unit delegated taking vital signs to an experienced unlicensed assistive personnel (UAP). Four hours later, the nurse notes the clients blood pressure is much higher than previous readings, and the clients mental status has changed. What action by the nurse would most likely have prevented this negative outcome?
a. Determining if the UAP knew how to take blood pressure
b. Double-checking the UAP by taking another blood pressure
c. Providing more appropriate supervision of the UAP
d. Taking the blood pressure instead of delegating the task

ANS: C
Supervision is one of the five rights of delegation and includes directing, evaluating, and following up on delegated tasks. The nurse should either have asked the UAP about the vital signs or instructed the UAP to report them right away. An experienced UAP should know how to take vital signs and the nurse should not have to assess this at this point. Double-checking the work defeats the purpose of delegation. Vital signs are within the scope of practice for a UAP and are permissible to delegate. The only appropriate answer is that the nurse did not provide adequate instruction to the UAP.

DIF: Applying/Application REF: 6
KEY: Supervision| delegation| unlicensed assistive personnel
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse is talking with a client who is moving to a new state and needs to find a new doctor and hospital there. What advice by the nurse is best?

a. Ask the hospitals there about standard nurse-client ratios.
b. Choose the hospital that has the newest technology.
c. Find a hospital that is accredited by The Joint Commission.
d. Use a facility affiliated with a medical or nursing school.

ANS: C
Accreditation by The Joint Commission (TJC) or other accrediting body gives assurance that the facility has a focus on safety. Nurse-client ratios differ by unit type and change over time. New technology doesnt necessarily mean the hospital is safe. Affiliation with a health professions school has several advantages, but safety is most important.

DIF: Understanding/Comprehension REF: 2
KEY: The Joint Commission (TJC)| accreditation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A newly graduated nurse in the hospital states that, since she is so new, she cannot participate in quality improvement (QI) projects. What response by the precepting nurse is best?
a. All staff nurses are required to participate in quality improvement here.
b. Even being new, you can implement activities designed to improve care.
c. Its easy to identify what indicators should be used to measure quality.
d. You should ask to be assigned to the research and quality committee.

ANS: B
The preceptor should try to reassure the nurse that implementing QI measures is not out of line for a newly licensed nurse. Simply stating that all nurses are required to participate does not help the nurse understand how that is possible and is dismissive. Identifying indicators of quality is not an easy, quick process and would not be the best place to suggest a new nurse to start. Asking to be assigned to the QI committee does not give the nurse information about how to implement QI in daily practice.

DIF: Applying/Application REF: 6
KEY: Quality improvement
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse is interested in making interdisciplinary work a high priority. Which actions by the nurse best demonstrate this skill? (Select all that apply.)
a. Consults with other disciplines on client care
b. Coordinates discharge planning for home safety
c. Participates in comprehensive client rounding
d. Routinely asks other disciplines about client progress
e. Shows the nursing care plans to other disciplines

ANS: A, B, C, D
Collaborating with the interdisciplinary team involves planning, implementing, and evaluating client care as a team with all other disciplines included. Simply showing other caregivers the nursing care plan is not actively involving them or collaborating with them.

DIF: Applying/Application REF: 4
KEY: Collaboration| interdisciplinary team
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse manager wishes to ensure that the nurses on the unit are practicing at their highest levels of competency. Which areas should the manager assess to determine if the nursing staff demonstrate competency according to the Institute of Medicine (IOM) report Health Professions Education: A Bridge to Quality? (Select all that apply.)

a. Collaborating with an interdisciplinary team
b. Implementing evidence-based care
c. Providing family-focused care
d. Routinely using informatics in practice
e. Using quality improvement in client care

ANS: A, B, D, E
The IOM report lists five broad core competencies that all health care providers should practice. These include collaborating with the interdisciplinary team, implementing evidence-based practice, providing client-focused care, using informatics in client care, and using quality improvement in client care.

DIF: Remembering/Knowledge REF: 3
KEY: Competencies| Institute of Medicine (IOM)
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. The nurse utilizing evidence-based practice (EBP) considers which factors when planning care? (Select all that apply.)
a. Cost-saving measures
b. Nurses expertise
c. Client preferences
d. Research findings
e. Values of the client

ANS: B, C, D, E
EBP consists of utilizing current evidence, the clients values and preferences, and the nurses expertise when planning care. It does not include cost-saving measures.

DIF: Remembering/Knowledge REF: 6
KEY: Evidence-based practice (EBP)
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A nurse manager wants to improve hand-off communication among the staff. What actions by the manager would best help achieve this goal? (Select all that apply.)
a. Attend hand-off rounds to coach and mentor.
b. Conduct audits of staff using a new template.
c. Create a template of topics to include in report.
d. Encourage staff to ask questions during hand-off.
e. Give raises based on compliance with reporting.

ANS: A, B, C, D
A good tool for standardizing hand-off reports and other critical communication is the SHARE model. SHARE stands for standardize critical information, hardwire within your system, allow opportunities to ask questions, reinforce quality and measurement, and educate and coach. Attending hand-off report gives the manager opportunities to educate and coach. Conducting audits is part of reinforcing quality. Creating a template is hardwiring within the system. Encouraging staff to ask questions and think critically about the information is allowing opportunities to ask questions. The manager may need to tie raises into compliance if the staff is resistive and other measures have failed, but this is not part of the SHARE model.

DIF: Applying/Application REF: 5
KEY: SHARE| hand-off communication
MSC: Integrated Process: Nursing Process: Intervention
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 02: Overview of Health Concepts for Medical-Surgical Nursing

MULTIPLE CHOICE

1. Acid-base balance occurs when the pH level of the blood is between:
a. 7.3 and 7.5
b. 7.35 and 7.45
c. 7.4 and 7.5
d. 7.25 and 7.35

ANS: B
Acid-base balance is the maintenance of arterial blood pH between 7.35 and 7.45 through hydrogen ion production and elimination.

DIF: Understanding/Comprehension REF: 13
KEY: Assessment
MSC: Physiological Adaptation | Fluid and Electrolyte Imbalances
NOT: Describe common fluid, electrolyte, and acid-base imbalances.

2. The nurse would expect a patient with respiratory acidosis to have an excessive amount of
a. Hydrogen ions.
b. Bicarbonate.
c. Oxygen.
d. Phosphate.

ANS: A
Respiratory acidosis occurs when the arterial blood pH level falls below 7.35 and is caused by either too many hydrogen ions in the body (respiratory acidosis) or too little bicarbonate (metabolic acidosis). Excessive oxygen and phosphate are not characteristic of respiratory acidosis.

DIF: Understanding/Comprehension REF: 13
KEY: Assessment
MSC: Physiological Adaptation | Fluid and Electrolyte Imbalances
NOT: Describe common fluid, electrolyte, and acid-base imbalances.

3. The best way for an individual to maintain acid-base balance is to
a. avoid or quit smoking.
b. exercise regularly.
c. eat healthy and well-balanced meals.
d. All of the above.

ANS: D
Maintaining a healthy lifestyle is the best way to maintain acid-base balance. For example, most cases of COPD can be prevented by avoiding or quitting smoking, while regular exercise and a healthy diet can decrease the incidence of type-2 diabetes.

DIF: Patient education REF: 14
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. The process to control cellular growth, replication, and differentiation to maintain homeostasis is called:
a. cellular regulation.
b. cellular impairment.
c. cellular reproduction.
d. cellular tumor.

ANS: A
Cellular Regulation is the term used to describe both the positive and negative aspects of cellular function

within the body.

DIF: Understanding/Comprehension REF: 14
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. A defining characteristic of malignant (cancerous) cells is:
a. they cannot spread to other tissues or organs.
b. they can invade healthy cells, tissues, and organs.
c. they are not usually a health risk.
d. none of the above.

ANS: B
Malignant (cancerous) cells have no comparison to the original cells from which they are derived, and they have the ability to invade healthy cells, tissues, and other organs through tumor formation and invasion. On the other hand, Benign cells do not have the ability to spread to other tissues or organs.

DIF: Understanding/Comprehension REF: 14
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

6. Specialized cells that circulate in the body to promote clotting are called:
a. anticoagulants.
b. proteins.
c. emboli.
d. platelets.

ANS: D
Clotting is a complex, multi-step process through which blood forms a protein-based clot to prevent excessive bleeding. Platelets (thrombocytes) are the specialized cells that circulate in the blood and are activated when an injury occurs. Once activated, these cells become sticky, causing them to clump together to form a temporary, localized, solid plug.

DIF: Understanding/Comprehension REF: 15
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

7. An increase in platelet stickiness can lead to:
a. hypercoagulability
b. thromobocytopenia
c. embolus
d. atrial fibrillation

ANS: A
Hypercoagulability refers to an increase in clotting ability caused by an excess of platelets or excessive plately stickiness, which can impair blood flow. The opposite end of the spectrum involves an inability to form adequate clots, which often occurs when there is an inadequate number of circulating platelets or a reduction in platelet stickiness.

DIF: Understanding/Comprehension REF: 15
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. Signs and symptoms of _____ thromobsis include localized redness, swelling, and warmth:
a. arterial

b. venous
c. partial
d. atrial

ANS: B
Venous thrombosis is a clot formation in either superficial or deep veins, usually in the leg, and can be observed locally.

DIF: Understanding/Comprehension REF: 16
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

9. A serious condition which is not locally observable and is typically manifested by decreased blood flow to a distal extremity is known as _____ thrombosis.
a. arterial
b. venous
c. partial
d. atrial

ANS: A
Arterial thrombosis is manifested by decreased blood flow (perfusion) to a distal extremity or internal organ. For example, the distal leg can become pale and cool in the case of a femoral arterial clot due to blockage of blood to the leg. This is an emergent condition and requires immediate intervention.

DIF: Understanding/Comprehension REF: 16
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

10. A high-level thinking process that allows an individual to make decisions and judgments is known as:
a. amnesia
b. personality
c. reasoning
d. memory

ANS: C
Reasoning is the high-level cognitive thinking process that helps individuals make decisions and judgments. Personality is the way an individual feels and behaves, while Memory is the ability of an individual to retain and recall information. Amnesia refers to a loss of memory caused by brain trauma, congenital disorders, or acute health problems.

DIF: Understanding/Comprehension REF: 16
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

11. A form of inadequate cognition in older adults which is manifested by an acute, fluctuating confusional state is known as:
a. dementia
b. delerium
c. amnesia
d. depression

ANS: B
Delerium is the form of acute, fluctuating confusion which lasts from a few hours to less than 1 month and that may be treatable. Dementia is a chronic state of confusion that may last from a few months to many years and that may not be reversible. Amnesia refers to a loss of memory caused by brain trauma, congenital disorders, or acute health problems.

DIF: Understanding/Comprehension REF: 16
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

12. The most common causes of decreased comfort for a patient are pain and _____.
a. light-headedness
b. nausea
c. emotional stress
d. depression

ANS: C
Pain and emotional stress are the two leading causes of discomfort for a patient. For example, patients who are having surgery are often anxious and feel stressed about the procedure. This emotional stress may negatively impact the outcome of surgery.

DIF: Understanding/Comprehension REF: 17
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment

13. The inability to pass stool is known as _____.
a. constipation
b. obstipation
c. diarrhea
d. incontinence

ANS: B
Obstipation is the inability to pass stool during bowel elimination. Constipation refers to the condition where stool can be hard, dry, and difficult to pass through the rectum. Diarrhea is at the opposite end of the continuum from constipation, and occurs when stool is watery and without solid form. Elimination is the general term to describe the excretion of waste from the body by the gastrointestinal tract and by the urinary system.

DIF: Understanding/Comprehension REF: 18
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

14. Hypokalemia can occur in patients with prolonged diarrhea and is caused by a decrease in:
a. calcium
b. magnesium
c. sodium
d. potassium

ANS: D
Hypokalemia occurs when there is a decrease in serum potassium. It can be a life-threatening condition because it often causes rhythm abnormalities. An excess of potassium is referred to as Hyperkalemia.

DIF: Understanding/Comprehension REF: 18
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

15. The minimum hourly urinary output in a patient should be at least:
a. 5 mL per hour
b. 10 mL per hour
c. 30 mL per hour
d. 60 mL per hour

ANS: C
30 mL per hour is the minimum hourly urinary output in a normal healthy adult. A decrease in urinary output is a sign of diminished kidney activity and fluid deficit.

DIF: Understanding/Comprehension REF: 20
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

16. The best indicator of fluid volume changes in the body is:
a. skin dryness
b. weight changes
c. blood pressure
d. pulse rate

ANS: C
Changes in weight are the best indicator of fluid volume changes in the body. Monitoring blood pressure, checking pulse rate and quality, and assessing skin and mucous membranes for dryness are strong secondary indicators.

DIF: Understanding/Comprehension REF: 20
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

17. Immunity which occurs when antibodies are passed from the mother to the fetus through the placenta or through breast milk is called:
a. natural passive
b. artifical passive
c. natural active
d. artifical active

ANS: A
Artifical passive immunity occurs via a specific transfusion. Natural active immunity occurs when an antigen enters the body and the body creates antibodies to fight off the antigen. Artifical active immunity occurs via vaccination or immunization.

DIF: Understanding/Comprehension REF: 21-22
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

18. A major serum protein that is below normal in patients who have inadequate nutrition is:
a. Albumin
b. Globulin
c. Fibrinogen
d. Transferrin

ANS: A
A serum laboratory test to measure Albumin is the most common assessment for generalized malnutrition.

DIF: Understanding/Comprehension REF: 25
KEY: Assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 03: Common Health Problems of Older Adults

MULTIPLE CHOICE

1. A nurse working with older adults in the community plans programming to improve morale and emotional health in this population. What activity would best meet this goal?
a. Exercise program to improve physical function
b. Financial planning seminar series for older adults
c. Social events such as dances and group dinners
d. Workshop on prevention from becoming an abuse victim

ANS: A
All activities would be beneficial for the older population in the community. However, failure in performing ones own activities of daily living and participating in society has direct effects on morale and life satisfaction. Those who lose the ability to function independently often feel worthless and empty. An exercise program designed to maintain and/or improve physical functioning would best address this need.

DIF: Applying/Application REF: 32
KEY: Independence| autonomy| older adult
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse caring for an older client on a medical-surgical unit notices the client reports frequent constipation and only wants to eat softer foods such as rice, bread, and puddings. What assessment should the nurse perform first?
a. Auscultate bowel sounds.
b. Check skin turgor.
c. Perform an oral assessment.
d. Weigh the client.

ANS: C
Poorly fitting dentures and other dental problems are often manifested by a preference for soft foods and constipation from the lack of fiber. The nurse should perform an oral assessment to determine if these problems exist. The other assessments are important, but will not yield information specific to the clients food preferences as they relate to constipation.

DIF: Applying/Application REF: 30
KEY: Nutrition| dentures| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nursing faculty member working with students explains that the fastest growing subset of the older population is which group?
a. Elite old
b. Middle old
c. Old old
d. Young old

ANS: C
The old old is the fastest growing subset of the older population. This is the group comprising those 85 to 99 years of age. The young old are between 65 and 74 years of age; the middle old are between 75 and 84 years of age; and the elite old are over 100 years of age.

DIF: Remembering/Knowledge REF: 29
KEY: Adulthood| aging| old old MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse is working with an older client admitted with mild dehydration. What teaching does the nurse provide to best address this issue?

a. Cut some sodium out of your diet.
b. Dehydration can cause incontinence.
c. Have something to drink every 1 to 2 hours.
d. Take your diuretic in the morning.

ANS: C
Older adults often lose their sense of thirst. Since they should drink 1 to 2 liters of water a day, the best remedy is to have the older adult drink something each hour or two, whether or not he or she is thirsty. Cutting some sodium from the diet will not address this issue. Although dehydration can cause incontinence from the irritation of concentrated urine, this information will not help prevent the problem of dehydration. Instructing the client to take a diuretic in the morning rather than in the evening also will not directly address this issue.

DIF: Applying/Application REF: 31
KEY: Dehydration| older adult| hydration MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse caring for an older adult has provided education on high-fiber foods. Which menu selection by the client demonstrates a need for further review?
a. Barley soup
b. Black beans
c. White rice
d. Whole wheat bread

ANS: C
Older adults need 25 to 50 grams of fiber a day. White rice is low in fiber. Foods high in fiber include barley, beans, and whole wheat products.

DIF: Applying/Application REF: 31
KEY: Nutrition| fiber| older adult
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A home health care nurse is planning an exercise program with an older client who lives at home independently but whose mobility issues prevent much activity outside the home. Which exercise regimen would be most beneficial to this adult?
a. Building strength and flexibility
b. Improving exercise endurance
c. Increasing aerobic capacity
d. Providing personal training

ANS: A
This older adult is mostly homebound. Exercise regimens for homebound clients include things to increase functional ability for activities of daily living. Strength and flexibility will help the client to be able to maintain independence longer. The other plans are good but will not specifically maintain the clients functional abilities.

DIF: Applying/Application REF: 32
KEY: Exercise| functional ability| older adult
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. An older adult recently retired and reports being depressed and lonely. What information should the nurse assess as a priority?
a. History of previous depression
b. Previous stressful events
c. Role of work in the adults life
d. Usual leisure time activities

ANS: C
Often older adults lose support systems when their roles change. For instance, when people retire, they may

lose their entire social network, leading them to feeling depressed and lonely. The nurse should first assess the role that work played in the clients life. The other factors can be assessed as well, but this circumstance is commonly seen in the older population.

DIF: Applying/Application REF: 32
KEY: Depression| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

8. A nurse is assessing coping in older women in a support group for recent widows. Which statement by a participant best indicates potential for successful coping?
a. I have had the same best friend for decades.
b. I think I am coping very well on my own.
c. My kids come to see me every weekend.
d. Oh, I have lots of friends at the senior center.

ANS: A
Friendship and support enhance coping. The quality of the relationship is what is most important, however. People who have close, intimate, stable relationships with others in whom they confide are more likely to cope with crisis.

DIF: Remembering/Knowledge REF: 32
KEY: Coping| relationships| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

9. A home health care nurse has conducted a home safety assessment for an older adult. There are five concrete steps leading out from the front door. Which intervention would be most helpful in keeping the older adult safe on the steps?
a. Have the client use a walker or cane on the steps.
b. Install contrasting color strips at the edge of each step.
c. Instruct the client to use the garage door instead.
d. Tell the client to use a two-footed gait on the steps.

ANS: B
As a person ages, he or she may experience a decreased sense of touch. The older adult may not be aware of where his or her foot is on the step. Installing contrasting color strips at the end of each step will help increase awareness. If the client does not need an assistive device, he or she should not use one just on stairs. Using an alternative door may be necessary but does not address making the front steps safer. A two-footed gait may not help if the client is unaware of where the foot is on the step.

DIF: Applying/Application REF: 33
KEY: Safety| falls| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. An older adult is brought to the emergency department because of sudden onset of confusion. After the client is stabilized and comfortable, what assessment by the nurse is most important?
a. Assess for orthostatic hypotension.
b. Determine if there are new medications.
c. Evaluate the client for gait abnormalities.
d. Perform a delirium screening test.

ANS: B
Medication side effects and adverse effects are common in the older population. Something as simple as a new antibiotic can cause confusion and memory loss. The nurse should determine if the client is taking any new medications. Assessments for orthostatic hypotension, gait abnormalities, and delirium may be important once more is known about the clients condition.

DIF: Applying/Application REF: 33
KEY: Medications| medication safety| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11. An older adult client takes medication three times a day and becomes confused about which medication should be taken at which time. The client refuses to use a pill sorter with slots for different times, saying Those are for old people. What action by the nurse would be most helpful?
a. Arrange medications by time in a drawer.
b. Encourage the client to use easy-open tops.
c. Put color-coded stickers on the bottle caps.
d. Write a list of when to take each medication.

ANS: C
Color-coded stickers are a fast, easy-to-remember system. One color is for morning meds, one for evening meds, and the third color is for nighttime meds. Arranging medications by time in a drawer might be helpful if the person doesnt accidentally put them back in the wrong spot. Easy-open tops are not related. Writing a list might be helpful, but not if it gets misplaced. With stickers on the medication bottles themselves, the reminder is always with the medication.

DIF: Applying/Application REF: 34
KEY: Medications| medication safety| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. An older adult client is in the hospital. The client is ambulatory and independent. What intervention by the nurse would be most helpful in preventing falls in this client?
a. Keep the light on in the bathroom at night.
b. Order a bedside commode for the client.
c. Put the client on a toileting schedule.
d. Use siderails to keep the client in bed.

ANS: A
Although this older adult is independent and ambulatory, being hospitalized can create confusion. Getting up ir a dark, unfamiliar environment can contribute to falls. Keeping the light on in the bathroom will help reduce the likelihood of falling. The client does not need a commode or a toileting schedule. Siderails used to keep the client in bed are considered restraints and should not be used in that fashion.

DIF: Applying/Application REF: 41
KEY: Falls| safety| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. An older client had hip replacement surgery and the surgeon prescribed morphine sulfate for pain. The client is allergic to morphine and reports pain and muscle spasms. When the nurse calls the surgeon, which medication should he or she suggest in place of the morphine?
a. Cyclobenzaprine (Flexeril)
b. Hydromorphone hydrochloride (Dilaudid)
c. Ketorolac (Toradol)
d. Meperidine (Demerol)

ANS: B
Cyclobenzaprine (used for muscle spasms), ketorolac, and meperidine (both used for pain) are all on the Beers list of potentially inappropriate medications for use in older adults and should not be suggested. The nurse should suggest hydromorphone hydrochloride.

DIF: Remembering/Knowledge REF: 36
KEY: Medications| Beers list| older adult
MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14. A nurse admits an older client from a home environment where she lives with her adult son and daughter-in-law. The client has urine burns on her skin, no dentures, and several pressure ulcers. What action by the nurse is most appropriate?
a. Ask the family how these problems occurred.
b. Call the police department and file a report.
c. Notify Adult Protective Services.
d. Report the findings as per agency policy.

ANS: D
These findings are suspicious for abuse. Health care providers are mandatory reporters for suspected abuse. The nurse should notify social work, case management, or whomever is designated in policies. That person can then assess the situation further. If the police need to be notified, that is the person who will notify them. Adult Protective Services is notified in the community setting.

DIF: Applying/Application REF: 39
KEY: Abuse| older adult
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse caring for an older client in the hospital is concerned the client is not competent to give consent for upcoming surgery. What action by the nurse is best?
a. Call Adult Protective Services.
b. Discuss concerns with the health care team.
c. Do not allow the client to sign the consent.
d. Have the clients family sign the consent.

ANS: B
In this situation, each facility will have a policy designed for assessing competence. The nurse should bring these concerns to an interdisciplinary care team meeting. There may be physiologic reasons for the client to be temporarily too confused or incompetent to give consent. If an acute condition is ruled out, the staff should follow the legal procedure and policies in their facility and state for determining competence. The key is to bring the concerns forward. Calling Adult Protective Services is not appropriate at this time. Signing the consent should wait until competence is determined unless it is an emergency, in which case the next of kin can sign if there are grave doubts as to the clients ability to provide consent.

DIF: Applying/Application REF: 36
KEY: Competence| autonomy| older adult
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nursing student working in an Adult Care for Elders unit learns that frailty in the older population includes which components? (Select all that apply.)
a. Dementia
b. Exhaustion
c. Slowed physical activity
d. Weakness
e. Weight gain

ANS: B, C, D
Frailty is a syndrome consisting of unintentional weight loss, slowed physical activity and exhaustion, and weakness. Weight gain and dementia are not part of this cluster of manifestations.

DIF: Remembering/Knowledge REF: 29
KEY: Frailty| frail elderly| older adult
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Health Promotion and Maintenance

2. A home health care nurse assesses an older client for the intake of nutrients needed in larger amounts than in younger adults. Which foods found in an older adults kitchen might indicate an adequate intake of these nutrients? (Select all that apply.)
a. 1% milk
b. Carrots
c. Lean ground beef
d. Oranges
e. Vitamin D supplements

ANS: A, B, D, E
Older adults need increased amounts of calcium; vitamins A, C, and D; and fiber. Milk has calcium; carrots have vitamin A; the vitamin D supplement has vitamin D; and oranges have vitamin C. Lean ground beef is healthier than more fatty cuts, but does not contain these needed nutrients.

DIF: Applying/Application REF: 30
KEY: Nutrition| nutritional requirements| older adults
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse working with older adults assesses them for common potential adverse medication effects. For what does the nurse assess? (Select all that apply.)
a. Constipation
b. Dehydration
c. Mania
d. Urinary incontinence
e. Weakness

ANS: A, B, E
Common adverse medication effects include constipation/impaction, dehydration, and weakness. Mania and incontinence are not among the common adverse effects, although urinary retention is.

DIF: Remembering/Knowledge REF: 34
KEY: Medications| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse manager institutes the Fulmer Spices Framework as part of the routine assessment of older adults in the hospital. The nursing staff assesses for which factors? (Select all that apply.)
a. Confusion
b. Evidence of abuse
c. Incontinence
d. Problems with behavior
e. Sleep disorders

ANS: A, C, E
SPICES stands for sleep disorders, problems with eating or feeding, incontinence, confusion, and evidence of falls.

DIF: Remembering/Knowledge REF: 40
KEY: SPICES| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A visiting nurse is in the home of an older adult and notes a 7-pound weight loss since last months visit. What actions should the nurse perform first? (Select all that apply.)
a. Assess the clients ability to drive or transportation alternatives.
b. Determine if the client has dentures that fit appropriately.

c. Encourage the client to continue the current exercise plan.
d. Have the client complete a 3-day diet recall diary.
e. Teach the client about proper nutrition in the older population.

ANS: A, B, D
Assessment is the first step of the nursing process and should be completed prior to intervening. Asking about transportation, dentures, and normal food patterns would be part of an appropriate assessment for the client. There is no information in the question about the older adult needing to lose weight, so encouraging him or her to continue the current exercise regimen is premature and may not be appropriate. Teaching about proper nutrition is a good idea, but teaching needs to be tailored to the clients needs, which the nurse does not yet know.

DIF: Applying/Application REF: 30
KEY: Nutrition| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A hospitalized older adult has been assessed at high risk for skin breakdown. Which actions does the registered nurse (RN) delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Assess skin redness when turning.
b. Document Braden Scale results.
c. Keep the clients skin dry.
d. Obtain a pressure-relieving mattress.
e. Turn the client every 2 hours.

ANS: C, D, E
The nurses aide or UAP can assist in keeping the clients skin dry, order a special mattress on direction of the RN, and turn the client on a schedule. Assessing the skin is a nursing responsibility, although the aide should be directed to report any redness noticed. Documenting the Braden Scale results is the RNs responsibility as the RN is the one who performs that assessment.

DIF: Applying/Application REF: 42
KEY: Skin breakdown| older adult| delegation| unlicensed assistive personnel
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse admits an older client to the hospital who lives at home with family. The nurse assesses that the client is malnourished. What actions by the nurse are best? (Select all that apply.)
a. Contact Adult Protective Services or hospital social work.
b. Notify the provider that the client needs a tube feeding.
c. Perform and document results of a Braden Scale assessment.
d. Request a dietary consultation from the health care provider.
e. Suggest a high-protein oral supplement between meals.

ANS: C, D, E
Malnutrition in the older population is multifactorial and has several potential adverse outcomes. Appropriate actions by the nurse include assessing the clients risk for skin breakdown with the Braden Scale, requesting a consultation with a dietitian, and suggesting a high-protein meal supplement. There is no evidence that the client is being abused or needs a feeding tube at this time.

DIF: Applying/Application REF: 40
KEY: Nutrition| malnutrition| older adult| Braden Scale
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 04: Assessment and Care of Patients with Pain

MULTIPLE CHOICE

1. A student asks the nurse what is the best way to assess a clients pain. Which response by the nurse is best?
a. Numeric pain scale
b. Behavioral assessment
c. Objective observation
d. Clients self-report

ANS: D
Many ways to measure pain are in use, including numeric pain scales, behavioral assessments, and other objective observations. However, the most accurate way to assess pain is to get a self-report from the client.

DIF: Remembering/Knowledge REF: 46
KEY: Pain| pain assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

2. A new nurse reports to the precepting nurse that a client requested pain medication, and when the nurse brought it, the client was sound asleep. The nurse states the client cannot possibly sleep with the severe pain the client described. What response by the experienced nurse is best?
a. Being able to sleep doesnt mean pain doesnt exist.
b. Have you ever experienced any type of pain?
c. The client should be assessed for drug addiction.
d. Youre right; I would put the medication back.

ANS: A
A clients description is the most accurate assessment of pain. The nurse should believe the client and provide pain relief. Physiologic changes due to pain vary from client to client, and assessments of them should not supersede the clients descriptions, especially if the pain is chronic in nature. Asking if the new nurse has had pain is judgmental and flippant, and does not provide useful information. This amount of information does not warrant an assessment for drug addiction. Putting the medication back and ignoring the clients report of pain serves no useful purpose.

DIF: Understanding/Comprehension REF: 49
KEY: Pain| pain assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Health Promotion and Maintenance

3. The nurse in the surgery clinic is discussing an upcoming surgical procedure with a client. What information provided by the nurse is most appropriate for the clients long-term outcome?
a. At least you know that the pain after surgery will diminish quickly.
b. Discuss acceptable pain control after your operation with the surgeon.
c. Opioids often cause nausea but you wont have to take them for long.
d. The nursing staff will give you pain medication when you ask them for it.

ANS: B
The best outcome after a surgical procedure is timely and satisfactory pain control, which diminishes the likelihood of chronic pain afterward. The nurse suggests that the client advocate for himself and discuss acceptable pain control with the surgeon. Stating that pain after surgery is usually short lived does not provide the client with options to have personalized pain control. To prevent or reduce nausea and other side effects from opioids, a multimodal pain approach is desired. For acute pain after surgery, giving pain medications around the clock instead of waiting until the client requests it is a better approach.

DIF: Applying/Application REF: 47
KEY: Pain| acute pain
MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse is assessing pain on a confused older client who has difficulty with verbal expression. What pain assessment tool would the nurse choose for this assessment?
a. Numeric rating scale
b. Verbal Descriptor Scale
c. FACES Pain Scale-Revised
d. Wong-Baker FACES Pain Scale

ANS: C
All are valid pain rating scales; however, some research has shown that the FACES Pain Scale-Revised is preferred by both cognitively intact and cognitively impaired adults.

DIF: Applying/Application REF: 51
KEY: Pain assessment| FACES
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

5. The nurse is assessing a clients pain and has elicited information on the location, quality, intensity, effect on functioning, aggravating and relieving factors, and onset and duration. What question by the nurse would be best to ask the client for completing a comprehensive pain assessment?
a. Are you worried about addiction to pain pills?
b. Do you attach any spiritual meaning to pain?
c. How high would you say your pain tolerance is?
d. What pain rating would be acceptable to you?

ANS: D
A comprehensive pain assessment includes the items listed in the question plus the clients opinion on a functional goal, such as what pain rating would be acceptable to him or her. Asking about addiction is not warranted in an initial pain assessment. Asking about spiritual meanings for pain may give the nurse important information, but getting the basics first is more important. Asking about pain tolerance may give the client the idea that pain tolerance is being judged.

DIF: Applying/Application REF: 50
KEY: Pain assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse is assessing pain in an older adult. What action by the nurse is best?
a. Ask only yes-or-no questions so the client doesnt get too tired.
b. Give the client a picture of the pain scale and come back later.
c. Question the client about new pain only, not normal pain from aging.
d. Sit down, ask one question at a time, and allow the client to answer.

ANS: D
Some older clients do not report pain because they think it is a normal part of aging or because they do not want to be a bother. Sitting down conveys time, interest, and availability. Ask only one question at a time and allow the client enough time to answer it. Yes-or-no questions are an example of poor communication technique. Giving the client a pain scale, then leaving, might give the impression that the nurse does not have time for the client. Plus the client may not know how to use it. There is no normal pain from aging.

DIF: Applying/Application REF: 53
KEY: Pain assessment| older adult
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

7. The nurse receives a hand-off report. One client is described as a drug seeker who is obsessed with even tiny changes in physical condition and is on the light constantly asking for more pain medication. When assessing this clients pain, what statement or question by the nurse is most appropriate?

a. Help me understand how pain is affecting you right now.
b. I wish I could do more; is there anything I can get for you?
c. You cannot have more pain medication for 3 hours.
d. Why do you think the medication is not helping your pain?

ANS: A
This is an example of therapeutic communication. A client who is preoccupied with physical symptoms and is demanding may have some psychosocial impact from the pain that is not being addressed. The nurse is providing the client the chance to explain the emotional effects of pain in addition to the physical ones. Saying the nurse wishes he or she could do more is very empathetic, but this response does not attempt to learn more about the pain. Simply telling the client when the next medication is due also does not help the nurse understand the clients situation. Why questions are probing and often make clients defensive, plus the client may not have an answer for this question.

DIF: Applying/Application REF: 54
KEY: Pain| pain assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

8. A nurse on the medical-surgical unit has received a hand-off report. Which client should the nurse see first?
a. Client being discharged later on a complicated analgesia regimen
b. Client with new-onset abdominal pain, rated as an 8 on a 0-to-10 scale
c. Postoperative client who received oral opioid analgesia 45 minutes ago
d. Client who has returned from physical therapy and is resting in the recliner

ANS: B
Acute pain often serves as a physiologic warning signal that something is wrong. The client with new-onset abdominal pain needs to be seen first. The postoperative client needs 45 minutes to an hour for the oral medication to become effective and should be seen shortly to assess for effectiveness. The client going home requires teaching, which should be done after the first two clients have been seen and cared for, as this teaching will take some time. The client resting comfortably can be checked on quickly before spending time teaching the client who is going home.

DIF: Analyzing/Analysis REF: 46
KEY: Acute pain| pain assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse uses the Checklist of Nonverbal Pain Indicators to assess pain in a nonverbal client with advanced dementia. The client scores a zero. What action by the nurse is best?
a. Assess physiologic indicators and vital signs.
b. Do not give pain medication as no pain is indicated.
c. Document the findings and continue to monitor.
d. Try a small dose of analgesic medication for pain.

ANS: A
Assessing pain in a nonverbal client is difficult despite the use of a scale specifically designed for this population. The nurse should next look at physiologic indicators of pain and vital signs for clues to the presence of pain. Even a low score on this index does not mean the client does not have pain; he or she may be holding very still to prevent more pain. Documenting pain is important but not the most important action in this case. The nurse can try a small dose of analgesia, but without having indices to monitor, it will be difficult to assess for effectiveness. However, if the client has a condition that could reasonably cause pain (i.e., recent surgery), the nurse does need to treat the client for pain.

DIF: Applying/Application REF: 55
KEY: Pain assessment| Checklist of Nonverbal Pain Indicators
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

10. A student nurse asks why several clients are getting more than one type of pain medication instead of very high doses of one medication. What response by the registered nurse is best?
a. A multimodal approach is the preferred method of control.
b. Doctors are much more liberal with pain medications now.
c. Pain is so complex it takes different approaches to control it.
d. Clients are consumers and they demand lots of pain medicine.

ANS: C
Pain is a complex phenomenon and often responds best to a regimen that uses different types of analgesia. This is called a multimodal approach. Using this terminology, however, may not be clear to the student if the terminology is not understood. Doctors may be more liberal with pain medications, but that is not the best reason for this approach. Saying that clients are consumers who demand medications sounds as if the nurse is discounting their pain experiences.

DIF: Understanding/Comprehension REF: 55
KEY: Pain| pharmacologic pain management| multimodal pain management
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Adaptation: Pharmacological and Parenteral Therapies

11. A client who had surgery has extreme postoperative pain that is worsened when trying to participate in physical therapy. What intervention for pain management does the nurse include in the clients care plan?
a. As-needed pain medication after therapy
b. Client-controlled analgesia with a basal rate
c. Pain medications prior to therapy only
d. Round-the-clock analgesia with PRN analgesics

ANS: D
Severe pain related to surgery or tissue trauma is best managed with round-the-clock dosing. Breakthrough pain associated with specific procedures is managed with additional medication. An as-needed regimen will not control postoperative pain. A client-controlled analgesia pump might be a good idea but needs basal (continuous) and bolus (intermittent) settings to accomplish adequate pain control. Pain control needs to be continuous, not just administered prior to therapy.

DIF: Applying/Application REF: 55
KEY: Pharmacologic pain management| pain
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A nurse on the postoperative inpatient unit receives a hand-off report on four clients using patient-controlled analgesia (PCA) pumps. Which client should the nurse see first?
a. Client who appears to be sleeping soundly
b. Client with no bolus request in 6 hours
c. Client who is pressing the button every 10 minutes
d. Client with a respiratory rate of 8 breaths/min

ANS: D
Continuous delivery of opioid analgesia can lead to respiratory depression and extreme sedation. A respiratory rate of 8 breaths/min is below normal, so the nurse should first check this client. The client sleeping soundly could either be overly sedated or just comfortable and should be checked next. Pressing the button every 10 minutes indicates the client has a high level of pain, but the device has a lockout determining how often a bolus can be delivered. Therefore, the client cannot overdose. The nurse should next assess that clients pain. The client who has not needed a bolus of pain medicine in several hours has well-controlled pain.

DIF: Applying/Application REF: 56
KEY: Patient-controlled analgesia (PCA) pump| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A registered nurse (RN) and nursing student are caring for a client who is receiving pain medication via

patient-controlled analgesia (PCA). What action by the student requires the RN to intervene?
a. Assesses the clients pain level per agency policy
b. Monitors the clients respiratory rate and sedation
c. Presses the button when the client cannot reach it
d. Reinforces client teaching about using the PCA pump

ANS: C
The client is the only person who should press the PCA button. If the client cannot reach it, the student should either reposition the client or the button, and should not press the button for the client. The RN should intervene at this point. The other actions are appropriate.

DIF: Applying/Application REF: 56
KEY: Patient-controlled analgesia (PCA)| pharmacologic pain management
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

14. A client is put on twice-daily acetaminophen (Tylenol) for osteoarthritis. What finding in the clients health history would lead the nurse to consult with the provider over the choice of medication?
a. 25pack-year smoking history
b. Drinking 3 to 5 beers a day
c. Previous peptic ulcer
d. Taking warfarin (Coumadin)

ANS: B
The major serious side effect of acetaminophen is hepatotoxicity and liver damage. Drinking 3 to 5 beers each day may indicate underlying liver disease, which should be investigated prior to taking chronic acetaminophen. The nurse should relay this information to the provider. Smoking is not related to acetaminophen side effects. Acetaminophen does not cause bleeding, so a previous peptic ulcer or taking warfarin would not be a problem.

DIF: Applying/Application REF: 56
KEY: Acetaminophen| pharmacologic pain management
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. A nurse is preparing to give a client ketorolac (Toradol) intravenously for pain. Which assessment findings would lead the nurse to consult with the provider?
a. Bilateral lung crackles
b. Hypoactive bowel sounds
c. Self-reported pain of 3/10
d. Urine output of 20 mL/2 hr

ANS: D
Drugs in this category can affect renal function. Clients should be adequately hydrated and demonstrate good renal function prior to administering ketorolac. A urine output of 20 mL/2 hr is well below normal, and the nurse should consult with the provider about the choice of drug. Crackles and hypoactive bowel sounds are not related. A pain report of 3 does not warrant a call to the physician. The medication may be part of a round-the-clock regimen to prevent and control pain and would still need to be given. If the medication is PRN, the nurse can ask the client if he or she still wants it.

DIF: Applying/Application REF: 58
KEY: Pharmacologic pain management| opioid analgesics| prostaglandins
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A hospitalized client uses a transdermal fentanyl (Duragesic) patch for chronic pain. What action by the nurse is most important for client safety?
a. Assess and record the clients pain every 4 hours.
b. Ensure the client is eating a high-fiber diet.
c. Monitor the clients bowel function every shift.

d. Remove the old patch when applying the new one.

ANS: D
The old fentanyl patch should be removed when applying a new patch so that accidental overdose does not occur. The other actions are appropriate, but not as important for safety.

DIF: Applying/Application REF: 59
KEY: Pharmacologic pain management| opioid analgesics| transdermal patch
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

17. A hospitalized client has a history of depression for which sertraline (Zoloft) is prescribed. The client also has a morphine allergy and a history of alcoholism. After surgery, several opioid analgesics are prescribed. Which one would the nurse choose?
a. Hydrocodone and acetaminophen (Lorcet)
b. Hydromorphone (Dilaudid)
c. Meperidine (Demerol)
d. Tramadol (Ultram)

ANS: B
Hydromorphone is a good alternative to morphine for moderate to severe pain. The nurse should not choose Lorcet because it contains acetaminophen (Tylenol) and the client has a history of alcoholism. Tramadol should not be used due to the potential for interactions with the clients sertraline. Meperidine is rarely used and is often restricted.

DIF: Analyzing/Analysis REF: 61
KEY: Pharmacologic pain management| opioid analgesics
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

18. A client has received an opioid analgesic for pain. The nurse assesses that the client has a Pasero Scale score of 3 and a respiratory rate of 7 shallow breaths/min. The clients oxygen saturation is 87%. What action should the nurse perform first?
a. Apply oxygen at 4 L/min.
b. Attempt to arouse the client.
c. Give naloxone (Narcan).
d. Notify the Rapid Response Team.

ANS: B
The Pasero Opioid-Induced Sedation Scale is used to assess for unwanted opioid-associated sedation. A Pasero Scale score of 3 is unacceptable but is managed by trying to arouse the client in order to take deep breaths and staying with the client until he or she is more alert. Administering oxygen will not help if the clients respiratory rate is 7 breaths/min. Giving naloxone and calling for a Rapid Response Team would be appropriate for a higher Pasero Scale score.

DIF: Applying/Application REF: 65
KEY: Pasero Opioid-Induced Sedation Scale| pharmacologic pain management| opioid analgesics MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. An older adult has diabetic neuropathy and often reports unbearable foot pain. About which medication would the nurse plan to educate the client?
a. Desipramine (Norpramin)
b. Duloxetine (Cymbalta)
c. Morphine sulfate
d. Nortriptyline (Pamelor)

ANS: B
Antidepressants and anticonvulsants often are used for neuropathic pain relief. Morphine would not be used for

this client. However, older adults do not tolerate tricyclic antidepressants very well, which eliminates desipramine and nortriptyline. Duloxetine would be the best choice for this older client.

DIF: Applying/Application REF: 66
KEY: Neuropathic pain| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

20. An emergency department (ED) manager wishes to start offering clients nonpharmacologic pain control methodologies as an adjunct to medication. Which strategy would be most successful with this client population?
a. Listening to music on a headset
b. Participating in biofeedback
c. Playing video games
d. Using guided imagery

ANS: A
Listening to music on a headset would be the most successful cognitive-behavioral pain control method for several reasons. First, in the ED, the nurse does not have time to teach clients complex modalities such as guided imagery or biofeedback. Second, clients who are anxious and in pain may not have good concentration, limiting the usefulness of video games. Playing music on a headset only requires the client to wear the headset and can be beneficial without strong concentration. A wide selection of music will make this appealing to more people.

DIF: Understanding/Comprehension REF: 68
KEY: Distraction| nonpharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

21. An older client who lives alone is being discharged on opioid analgesics. What action by the nurse is most important?
a. Discuss the need for home health care.
b. Give the client follow-up information.
c. Provide written discharge instructions.
d. Request a home safety assessment.

ANS: D
All these activities are appropriate when discharging a client whose needs will continue after discharge. A home safety assessment would be most important to ensure the safety of this older client.

DIF: Remembering/Knowledge REF: 69
KEY: Safety| older adult| opioid analgesics
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

22. A nurse is caring for four clients receiving pain medication. After the hand-off report, which client should the nurse see first?
a. Client who is crying and agitated
b. Client with a heart rate of 104 beats/min
c. Client with a Pasero Scale score of 4
d. Client with a verbal pain report of 9

ANS: C
The Pasero Opioid-Induced Sedation Scale has scores ranging from S to 1 to 4. A score of 4 indicates unacceptable somnolence and is an emergency. The nurse should see this client first. The nurse can delegate visiting with the crying client to a nursing assistant; the client may be upset and might benefit from talking or a comforting presence. The client whose pain score is 9 needs to be seen next, or the nurse can delegate this assessment to another nurse while working with the priority client. A heart rate of 104 beats/min is slightly above normal, and that client can be seen after the other two clients are cared for.

DIF: Applying/Application REF: 65
KEY: Pasero Opioid-Induced Sedation Scale| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

23. A nurse is caring for a client on an epidural patient-controlled analgesia (PCA) pump. What action by the nurse is most important to ensure client safety?
a. Assess and record vital signs every 2 hours.
b. Have another nurse double-check the pump settings.
c. Instruct the client to report any unrelieved pain.
d. Monitor for numbness and tingling in the legs.

ANS: B
PCA-delivered analgesia creates a potential risk for the client. Pump settings should always be double-checked. Assessing vital signs should be done per agency policy and nurse discretion, and may or may not need to be this frequent. Unrelieved pain should be reported but is not vital to client safety. Monitoring for numbness and tingling in the legs is an important function but will manifest after something has occurred to the client; monitoring does not prevent the event from occurring.

DIF: Applying/Application REF: 56
KEY: Patient-controlled analgesia (PCA)| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

24. A postoperative client is reluctant to participate in physical therapy. What action by the nurse is best?
a. Ask the client about pain goals and if they are being met.
b. Ask the client why he or she is being uncooperative with therapy.
c. Increase the dose of analgesia given prior to therapy sessions.
d. Tell the client that physical therapy is required to regain function.

ANS: A
A comprehensive pain management plan includes the clients goals for pain control. Adequate pain control is necessary to allow full participation in therapy. The first thing the nurse should do is to ask about the clients pain goals and if they are being met. If not, an adjustment to treatment can be made. If they are being met, the nurse can assess for other factors influencing the clients behavior. Asking the client why he or she is being uncooperative is not the best response for two reasons. First, why questions tend to put people on the defensive. Second, labeling the behavior is inappropriate. Simply increasing the pain medication may not be advantageous. Simply telling the client that physical therapy is required does not address the issue.

DIF: Applying/Application REF: 67
KEY: Pain goals| pain
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

25. A client is being discharged from the hospital after surgery on hydrocodone and acetaminophen (Lorcet). What discharge instruction is most important for this client?
a. Call the doctor if the Lorcet does not relieve your pain.
b. Check any over-the-counter medications for acetaminophen.
c. Eat more fiber and drink more water to prevent constipation.
d. Keep your follow-up appointment with the surgeon as scheduled.

ANS: B
All instructions are appropriate for this client. However, advising the client to check over-the-counter medications for acetaminophen is an important safety measure. Acetaminophen is often found in common over-the-counter medications and should be limited to 3000 mg/day.

DIF: Applying/Application REF: 56
KEY: Pharmacologic pain management| opioid analgesics
MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A faculty member explains to students the process by which pain is perceived by the client. Which processes does the faculty member include in the discussion? (Select all that apply.)
a. Induction
b. Modulation
c. Sensory perception
d. Transduction
e. Transmission

ANS: B, C, D, E
The four processes involved in making pain a conscious experience are modulation, sensory perception, transduction, and transmission.

DIF: Remembering/Knowledge REF: 47
KEY: Pain transmission| pain MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A faculty member explains the concepts of addiction, tolerance, and dependence to students. Which information is accurate? (Select all that apply.)
a. Addiction is a chronic physiologic disease process.
b. Physical dependence and addiction are the same thing.
c. Pseudoaddiction can result in withdrawal symptoms.
d. Tolerance is a normal response to regular opioid use.
e. Tolerance is said to occur when opioid effects decrease.

ANS: A, D, E
Addiction, tolerance, and dependence are important concepts. Addiction is a chronic, treatable disease with a neurologic and biologic basis. Tolerance occurs with regular administration of opioid analgesics and is seen when the effect of the analgesic decreases (either therapeutic effect or side effects). Dependence and addiction are not the same; dependence occurs with regular administration of analgesics and can result in withdrawal symptoms when they are discontinued abruptly. Pseudoaddiction is the mistaken diagnosis of addictive disease.

DIF: Remembering/Knowledge REF: 59
KEY: Dependence| tolerance| addiction MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A postoperative client has an epidural infusion of morphine and bupivacaine (Marcaine). What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Ask the client to point out any areas of numbness or tingling.
b. Determine how many people are needed to ambulate the client.
c. Perform a bladder scan if the client is unable to void after 4 hours.
d. Remind the client to use the incentive spirometer every hour.
e. Take and record the clients vital signs per agency protocol.

ANS: C, D, E
The UAP can assess and record vital signs, perform a bladder scan and report the results to the nurse, and remind the client to use the spirometer. The nurse is legally responsible for assessments and should ask the client about areas of numbness or tingling, and assess if the client is able to bear weight and walk.

DIF: Applying/Application REF: 63
KEY: Epidural| pharmacologic pain management| opioid analgesics
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A client with a broken arm has had ice placed on it for 20 minutes. A short time after the ice was removed,

the client reports that the effect has worn off and requests pain medication, which cannot be given yet. What actions by the nurse are most appropriate? (Select all that apply.)
a. Ask for a physical therapy consult.
b. Educate the client on cold therapy.
c. Offer to provide a heating pad.
d. Repeat the ice application.
e. Teach the client relaxation techniques.

ANS: B, D, E
Nonpharmacologic pain management can be very effective. These modalities include ice, heat, pressure, massage, vibration, and transcutaneous electrical stimulation. Since the client is unable to have more pain medication at this time, the nurse should focus on nonpharmacologic modalities. First the client must be educated; the effects of ice wear off quickly once it is removed, and the client may have had unrealistic expectations. The nurse can repeat the ice application and teach relaxation techniques if the client is open to them. A physical therapy consult will not help relieve acute pain. Heat would not be a good choice for this type of injury.

DIF: Applying/Application REF: 68
KEY: Ice| physical modalities| nonpharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A student nurse learns that there are physical consequences to unrelieved pain. Which factors are included in this problem? (Select all that apply.)
a. Decreased immune response
b. Development of chronic pain
c. Increased gastrointestinal (GI) motility
d. Possible immobility
e. Slower healing

ANS: A, B, D, E
There are many physiologic impacts of unrelieved pain, including decreased immune response; development of chronic pain; decreased GI motility; immobility; slower healing; prolonged stress response; and increased heart rate, blood pressure, and oxygen demand.

DIF: Remembering/Knowledge REF: 46
KEY: Pain| Unrelieved pain MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nursing student is studying pain sources. Which statements accurately describe different types of pain? (Select all that apply.)
a. Neuropathic pain sometimes accompanies amputation.
b. Nociceptive pain originates from abnormal pain processing.
c. Deep somatic pain is pain arising from bone and connective tissues.
d. Somatic pain originates from skin and subcutaneous tissues.
e. Visceral pain is often diffuse and poorly localized.

ANS: A, C, D, E
Neuropathic pain results from abnormal pain processing and is seen in amputations and neuropathies. Somatic pain can arise from superficial sources such as skin, or deep sources such as bone and connective tissues. Visceral pain originates from organs or their linings and is often diffuse and poorly localized. Nociceptive pain is normal pain processing and consists of somatic and visceral pain.

DIF: Remembering/Knowledge REF: 49
KEY: Pain| Nociceptive pain| neuropathic pain
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse on the postoperative unit administers many opioid analgesics. What actions by the nurse are best to

prevent unwanted sedation as a complication of these medications? (Select all that apply.)
a. Avoid using other medications that cause sedation.
b. Delay giving medication if the client is sleeping.
c. Give the lowest dose that produces good control.
d. Identify clients at high risk for unwanted sedation.
e. Use an oximeter to monitor clients receiving analgesia.

ANS: A, C, D, E
Sedation is a side effect of opioid analgesics. Some sedation can be expected, but protecting the client against unwanted and dangerous sedation is a critical nursing responsibility. The nurse should identify clients at high risk for unwanted sedation and give the lowest possible dose that produces satisfactory pain control. Avoid using other sedating medications such as antihistamines to treat itching. An oximeter can alert the nurse to a decrease in the clients oxygen saturation, which often follows sedation. A postoperative client frequently needs to be awakened for pain medication in order to avoid waking to out-of-control pain later.

DIF: Applying/Application REF: 66
KEY: Sedation| opioid analgesics
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A client reports a great deal of pain following a fairly minor operation. The surgeon leaves a prescription for the nurse to administer a placebo instead of pain medication. What actions by the nurse are most appropriate? (Select all that apply.)
a. Consult with the prescriber and voice objections.
b. Delegate administration of the placebo to another nurse.
c. Give the placebo and reassess the clients pain.
d. Notify the nurse manager of the physicians request.
e. Tell the client what the prescriber ordered.

ANS: A, D
Nurses should never give placebos to treat a clients pain (unless the client is in a research study). This practice is unethical and, in many states, illegal. The nurse should voice concerns with the prescriber and, if needed, contact the nurse manager. The nurse should not delegate giving the placebo to someone else, nor should the nurse give it. The nurse should not tell the client unless absolutely necessary (the client asks) as this will undermine the prescriber-client relationship.

DIF: Applying/Application REF: 66
KEY: Placebo
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

SHORT ANSWER

1. A client is to receive 4 mg morphine sulfate IV push. The pharmacy delivers 5 mg in a 2-mL vial. How much should the nurse administer for one dose? (Record your answer using a decimal rounded to the nearest tenth.) ____ mL

ANS:
1.6 mL

5x = 8 mL
x = 1.6 mL

DIF: Applying/Application REF: 63
KEY: Medication administration| drug calculation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse is preparing to give an infusion of acetaminophen (Ofirmev). The pharmacy delivers a bag containing 50 mL of normal saline and the Ofirmev. At what rate does the nurse set the IV pump to deliver this dose? (Record your answer using a whole number.) ____ mL/hr

ANS:
200 mL/hr
Intravenous acetaminophen (Ofirmev) is approved for treatment of pain and fever in adults and children ages 2 years and older and is given by a 15-minute infusion. To deliver 50 mL in 15 minutes, set the IV pump for 200 mL/hr. To run 50 mL in 60 minutes, the pump would be set for 50 mL/hr. To run this volume in one quarter of the time, divide by 4: 200 4 = 50.

DIF: Applying/Application REF: 63
KEY: Medication administration| drug calculation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 05: Genetic Concepts for Medical-Surgical Nursing

MULTIPLE CHOICE

1. A nurse is educating a client about genetic screening. The client asks why red-green color blindness, an X-linked recessive disorder noted in some of her family members, is expressed more frequently in males than females. How should the nurse respond?
a. Females have a decreased penetrance rate for this gene mutation and are therefore less likely to express the trait.
b. Females have two X chromosomes and one is always inactive. This inactivity decreases the effect of the gene.
c. The incidence of X-linked recessive disorders is higher in males because they do not have a second X chromosome to balance expression of the gene.
d. Males have only one X chromosome, which allows the X-linked recessive disorder to be transmitted from father to son.

ANS: C
Because the number of X chromosomes in males and females is not the same (1:2), the number of X-linked chromosome genes in the two genders is also unequal. Males have only one X chromosome, a condition called hemizygosity, for any gene on the X chromosome. As a result, X-linked recessive genes have a dominant expressive pattern of inheritance in males and a recessive expressive pattern of inheritance in females. This difference in expression occurs because males do not have a second X chromosome to balance the expression of any recessive gene on the first X chromosome. It is incorrect to say that one X chromosome of a pair is always inactive in females, or that females have a decreased penetrance rate for this gene mutation. X-linked recessive disorders cannot be transmitted from father to son, but the trait is transmitted from father to all daughters who will be carriers.

DIF: Understanding/Comprehension REF: 79
KEY: Genetics| sex-linked recessive MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A client is typed and crossmatched for a unit of blood. Which statement by the nurse indicates a need for further genetic education?
a. Blood type is formed from three gene alleles: A, B, and O.
b. Each blood type allele is inherited from the mother or the father.
c. If the clients blood type is AB, then the client is homozygous for that trait.
d. If the client has a dominant and a recessive blood type allele, only the dominant will be expressed.

ANS: C
There are three possible gene alleles: A, B, and O. Blood type is determined by only two of the three specific gene alleles. The blood type OO is homozygous in contrast to the blood type AB, which is heterozygous. In the blood type AO, the gene allele A is dominant and will be expressed as blood type A. It is true that each blood type allele is inherited from the mother or the father.

DIF: Understanding/Comprehension REF: 78
KEY: Genetics| gene| allele| blood type
MSC: Integrated Process: Nursing Process: Intervention
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse cares for a client of Asian descent who is prescribed warfarin (Coumadin). What action should the nurse perform first?
a. Schedule an international normalized ratio (INR) test to be completed each day.
b. Initiate fall precautions and strict activity limitations.
c. Teach the client about bleeding precautions, including frequent checks for any bruising.
d. Confirm the prescription starts warfarin at a lower-than-normal dose.

ANS: D
Most individuals of Asian heritage have a single nucleotide polymorphism in the CYP2C19 gene that results in

low activity of the enzyme produced. This mutation greatly reduces the metabolism of warfarin, leading to increased bleeding risks and other serious side effects. Any person of Asian heritage who needs anticoagulation therapy should be started on very low dosages of warfarin and should have his or her INR monitored more frequently. The nurse can always teach about the risk of bleeding and can monitor for any bruising. The priority action is for the nurse to check the prescription and confirm the dose prior to administering the medication. It is not necessary to initiate fall precautions and to limit activity based on the administration of warfarin.

DIF: Applying/Application REF: 76
KEY: Genetics| genetic mutations| cultural awareness
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse obtains health histories when admitting clients to a medical-surgical unit. With which client should the nurse discuss predisposition genetic testing?
a. Middle-aged woman whose mother died at age 48 of breast cancer
b. Young man who has all the symptoms of rheumatoid arthritis
c. Pregnant woman whose father has sickle cell disease
d. Middle-aged man of Eastern European Jewish ancestry

ANS: A
A client with a family history of breast cancer should be provided information about predisposition testing. Predisposition testing should be discussed with clients who are at high risk of hereditary breast, ovarian, and colorectal cancers so that the client can engage in heightened screening activities or interventions that reduce risk. The client with symptoms of rheumatoid arthritis should be given information about symptomatic diagnostic testing. The client with a familial history of sickle cell disease and the client who is of Eastern European Jewish ancestry should be given information about carrier genetic testing.

DIF: Applying/Application REF: 78
KEY: Genetics| genetic testing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A client who tests positive for a mutation in the BRCA1 gene allele asks a nurse to be present when she discloses this information to her adult daughter. How should the nurse respond?
a. I will request a genetic counselor who is more qualified to be present for this conversation.
b. The test results can be confusing; I will help you interpret them for your daughter.
c. Are you sure you want to share this information with your daughter, who may not test positive for this gene mutation?
d. This conversation may be difficult for both of you; I will be there to provide support.

ANS: D
A nurse should provide emotional support while the client tells her daughter the information she has learned about the test results. The nurse should not interpret the results or counsel the client or her daughter. The nurse should refer the client for counseling or support, if necessary.

DIF: Applying/Application REF: 80
KEY: Genetics| advocacy| support
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Psychosocial Integrity

6. A nurse consults a genetic counselor for a client whose mother has Huntington disease and is considering genetic testing. The client states, I know I want this test. Why do I need to see a counselor? How should the nurse respond?
a. The advanced practice nurse will advise you on whether you should have children or adopt.
b. Genetic testing can be a stressful experience. Counseling can provide support and education throughout the process.
c. There is no cure for this disease. The counselor will determine if there is any benefit to genetic testing.
d. Genetic testing is expensive. The counselor will advocate for you and help you obtain financial support.

ANS: B
Genetic testing is a stressful experience, and clients should be provided with support, education, and assistance with coping. Genetic testing should be performed only after genetic counseling has occurred. The client has the right to decide whether to have children or to participate in genetic testing. Nursing staff should provide both benefits and risks to genetic testing so that the client can make an informed decision. Financial support is not part of genetic counseling.

DIF: Applying/Application REF: 80
KEY: Genetics| genetic counseling MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

7. A health care provider prescribes genetic testing for a client who has a family history of colorectal cancer. Which action should the nurse take before scheduling the client for the procedure?
a. Confirm that informed consent was obtained and placed on the clients chart.
b. Provide genetic counseling to the client and the clients family members.
c. Assess if the client is prepared for the risk of psychological side effects.
d. Respect the clients right not to share the results of the genetic test.

ANS: A
Informed consent is required before genetic testing. The person tested is the one who gives consent. An advanced practice provider should explain the procedure and provide genetic counseling. Although the client should be prepared for the risk of psychological side effects and the clients rights should be respected, the procedure cannot occur without informed consent.

DIF: Applying/Application REF: 79
KEY: Genetics| informed consent
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse cares for an adult client who has received genetic testing. The clients mother asks to receive the results of her daughters genetic tests. Which action should the nurse take?
a. Obtain a signed consent from the client allowing test results to be released to the mother.
b. Invite the mother and other family members to participate in genetic counseling with the client.
c. Encourage the mother to undergo genetic testing to determine if she has the same risks as her child.
d. Direct the mother to speak with the client and support the clients decision to share or not share the results.

ANS: D
All conversations and test results must be kept confidential. The client has the right to determine who may be involved in discussions related to diagnosis and genetic testing, who may participate in genetic counseling with the client, and what information may be disclosed to family members. It is the nurses responsibility to provide a private environment for discussions and protect the clients information from improper disclosure. The nurse should support the clients right to disclose or not disclose information.

DIF: Applying/Application REF: 81
KEY: Genetics| confidentiality
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse cares for a client who has a genetic mutation that increases the risk for colon cancer. The client states that he does not want any family to know about this result. How should the nurse respond?
a. It is required by law that you inform your siblings and children about this result so that they also can be tested and monitored for colon cancer.
b. It is not necessary to tell your siblings because they are adults, but you should tell your children so that they can be tested before they decide to have children of their own.
c. It is not required that you tell anyone about this result. However, your siblings and children may also be at risk for colon cancer and this information might help them.
d. It is your decision to determine with whom, if anyone, you discuss this test result. However, you may be held liable if you withhold this information and a family member gets colon cancer.

ANS: C
This situation represents an ethical dilemma. It is the clients decision whether to disclose the information. However, the information can affect others in the clients family. The law does not require the client to tell family members about the results, nor can the client be held liable for not telling them. The nurse may consider it ethically correct for the client to tell family members so that they can take action to prevent the development of cancer, but the nurse must respect the clients decision.

DIF: Applying/Application REF: 81
KEY: Genetics| autonomy| confidentiality
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

10. A nurse cares for a client who has a specific mutation in the a1AT (alpha1-antitrypsin) gene. Which action should the nurse take?
a. Teach the client to perform monthly breast self-examinations and schedule an annual mammogram.
b. Support the client when she shares test results and encourages family members to be screened for cancer.
c. Advise the client to limit exposure to secondhand smoke and other respiratory irritants.
d. Obtain a complete health history to identify other genetic problems associated with this gene mutation.

ANS: C
The a1AT gene mutation increases risk for developing early-onset emphysema. Clients should be advised to limit exposure to smoke and other respiratory irritants as a means of decreasing environmental influences that may aggravate an early onset of emphysema. This gene mutation does not promote cancer, nor does it occur with other identified genetic problems. The BRCA1 gene mutation gives the client a higher risk for developing breast cancer.

DIF: Applying/Application REF: 82
KEY: Genetics| genetic mutations MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

11. A nurse cares for a pregnant client who has a family history of sickle cell disease. The client is unsure if she wants to participate in genetic testing. What action should the nurse take?
a. Provide information about the risks and benefits of genetic testing.
b. Empathize with the client and share a personal story about a hereditary disorder.
c. Teach the client that early detection can minimize transmission to the fetus.
d. Advocate for the client and her baby by encouraging genetic testing.

ANS: A
Genetic counseling is to be nondirective. The nurse should provide as much information as possible about the risks and benefits but should not influence the clients decision to test or not test. Once the client has made a decision, the nurse should support the client in that decision. Carrier testing will determine if a client without symptoms has an allele for a recessive disorder that could be transmitted to his or her child. Genetic testing will not minimize transmission of the disorder.

DIF: Applying/Application REF: 81
KEY: Genetics| genetic counseling
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

12. A nurse cares for a client who recently completed genetic testing and received a negative result. The client states, I feel guilty because so many of my family members are carriers of this disease and I am not. How should the nurse respond?
a. You are not genetically predisposed for this disease but you could still become ill. Lets discuss a plan for prevention.
b. Since many of your family members are carriers, you should undergo further testing to verify the results are accurate.
c. We usually encourage clients to participate in counseling after receiving test results. Can I arrange this for you?

d. It is normal to feel this way. I think you should share this news with your family so that they can support you.

ANS: C
Clients who have negative genetic test results need counseling and support. Some clients may have an unrealistic view of what a negative result means for their general health. Others may feel guilty that they were spared when some family members were not. The client will not be symptomatic if he is not a carrier of the disease. A second round of testing is not recommended, because false-negatives are rare with this type of testing. It is the clients choice to reveal test results to family members; the nurse should not encourage him to do this.

DIF: Applying/Application REF: 80
KEY: Genetics| advocacy| support MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

MULTIPLE RESPONSE

1. A nurse cares for a client who recently completed genetic testing that revealed that she has a BRCA1 gene mutation. Which actions should the nurse take next? (Select all that apply.)
a. Discuss potential risks for other members of her family.
b. Assist the client to make a plan for prevention and risk reduction.
c. Disclose the information to the medical insurance company.
d. Recommend the client complete weekly breast self-examinations.
e. Assess the clients response to the test results.
f. Encourage support by sharing the results with family members.

ANS: A, B, E
The medical-surgical nurse can assess the clients response to the test results, discuss potential risks for other family members, encourage genetic counseling, and assist the client to make a plan for prevention, risk reduction, and early detection. For some positive genetic test results, such as having a BRCA1 gene mutation, the risk for developing breast cancer is high but is not a certainty. Because the risk is high, the client should have a plan for prevention and risk reduction. One form of prevention is early detection. Breast self-examinations may be helpful when performed monthly, but those performed every week may not be useful, especially around the time of menses. A client who tests positive for a BRCA1 mutation should have at least yearly mammograms and ovarian ultrasounds to detect cancer at an early stage, when it is more easily cured. Owing to confidentiality, the nurse would never reveal any information about a client to an insurance company or family members without the clients permission.

DIF: Applying/Application REF: 81
KEY: Genetics| genetic testing| confidentiality| support
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A nurse completes pedigree charts for clients at a community health center. Which diagnosis should the nurse refer for carrier genetic testing? (Select all that apply.)
a. Huntington disease
b. Breast cancer
c. Hemophilia
d. Colorectal cancer
e. Sickle cell disease
f. Cystic fibrosis

ANS: C, E, F
Of the disease processes listed, the ones that would make the client a candidate for carrier genetic testing would be hemophilia, sickle cell disease, and cystic fibrosis. Although Huntington disease, breast cancer, and colorectal cancer all have genetic components, there is no evidence that carrier genetic testing would be beneficial in diseases such as these.

DIF: Remembering/Knowledge REF: 79

KEY: Genetics| genetic testing MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse teaches clients about patterns of inheritance for genetic disorders among adults. Which disorders have an autosomal dominant pattern of inheritance? (Select all that apply.)
a. Breast cancer
b. Alzheimers disease
c. Hemophilia
d. Huntington disease
e. Marfan syndrome
f. Cystic fibrosis

ANS: A, D, E
Breast cancer, Huntington disease, and Marfan syndrome have an autosomal dominant pattern of inheritance. Alzheimers disease is a complex disorder with familial clustering, hemophilia is a sex-linked recessive disorder, and cystic fibrosis has an autosomal recessive pattern of inheritance.

DIF: Remembering/Knowledge REF: 77
KEY: Genetics| patterns of inheritance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 06: Rehabilitation Concepts for Chronic and Disabling Health Problems

MULTIPLE CHOICE

1. A nurse assesses a client recovering from coronary artery bypass graft surgery. Which assessment should the nurse complete to evaluate the clients activity tolerance?
a. Vital signs before, during, and after activity
b. Body image and self-care abilities
c. Ability to use assistive or adaptive devices
d. Clients electrocardiography readings

ANS: A
To see whether a client is tolerating activity, vital signs are measured before, during, and after the activity. If the client is not tolerating activity, heart rate may increase more than 20 beats/min, blood pressure may increase over 20 mm Hg, and vital signs will not return to baseline within 5 minutes after the activity. A body image assessment is not necessary before basic activities are performed. Self-care abilities and ability to use assistive or adaptive devices is an important assessment when planning rehabilitation activities, but will not provide essential information about the clients activity tolerance. Electrocardiography is not used to monitor clients in a rehabilitation setting.

DIF: Applying/Application REF: 89
KEY: Rehabilitation care| functional ability
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse teaches a client with a past history of angina who has had a total knee replacement. Which statement should the nurse include in this clients teaching prior to beginning rehabilitation activities?
a. Use analgesics before and after activity, even if you are not experiencing pain.
b. Let me know if you start to experience shortness of breath, chest pain, or fatigue.
c. Do not take your prescribed beta blocker until after you exercise with physical therapy.
d. If you experience knee pain, ask the physical therapist to reschedule your therapy.

ANS: B
Participation in exercise may increase myocardial oxygen demand beyond the ability of the coronary circulation to deliver enough oxygen to meet the increased need. The nurse must determine the clients ability to tolerate different activity levels. Asking the client to notify the nurse if symptoms of shortness of breath, chest pain, or fatigue occur will assist the nurse in developing an appropriate cardiac rehabilitation plan.

DIF: Applying/Application REF: 90
KEY: Rehabilitation care| nitroglycerin/nitrates| pain
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A rehabilitation nurse prepares to move a client who has new bilateral leg amputations. Which is the best approach?
a. Use the bear-hug method to transfer the client safely.
b. Ask several members of the health care team to carry the client.
c. Utilize the facilitys mechanical lift to move the client.
d. Consult physical therapy before performing all transfers.

ANS: C
Use mechanical lifts to minimize staff work-related musculoskeletal injuries. The bear-hug method and the use of several members of the team to carry the client do not eliminate staff injuries. Physical therapy should be consulted but cannot be depended upon for all transfers. Nursing staff must be capable of transferring a client safely.

DIF: Applying/Application REF: 93

KEY: Rehabilitation care| patient safety| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse performs passive range-of-motion exercises on a semiconscious client and meets resistance while attempting to extend the right elbow more than 45 degrees. Which action should the nurse take next?
a. Splint the joint and continue passive range of motion to the shoulder only.
b. Progressively increase joint motion 5 degrees beyond resistance each day.
c. Apply weights to the right distal extremity before initiating any joint exercise.
d. Continue to move the joint only to the point at which resistance is met.

ANS: D
Moving a joint beyond the point at which the client feels pain or resistance can damage the joint. The nurse should move the joint only to the point of resistance. Splinting the joint will not assist the clients range of motion. The clients joint should not be forced. Applying weights to the extremity will not increase range of motion of the joint but most likely will cause damage.

DIF: Applying/Application REF: 96
KEY: Rehabilitation care| exercise
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A nurse cares for a client with decreased mobility. Which intervention should the nurse implement to decrease this clients risk of fracture?
a. Apply shoes to improve foot support.
b. Perform weight-bearing activities.
c. Increase calcium-rich foods in the diet.
d. Use pressure-relieving devices.

ANS: B
Weight-bearing activity reduces bone mineral loss and promotes bone uptake of calcium, contributing to maintenance of bone density and reducing the risk for bone fracture. Although increasing calcium in the diet is a good intervention, this alone will not reduce the clients susceptibility to bone fracture. A foot support and pressure-relieving devices will not help prevent fracture, but may help with mobility and skin integrity.

DIF: Applying/Application REF: 95
KEY: Rehabilitation care| exercise
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A rehabilitation nurse cares for a client who has generalized weakness and needs assistance with activities of daily living. Which exercise should the nurse implement?
a. Passive range of motion
b. Active range of motion
c. Resistive range of motion
d. Aerobic exercise

ANS: B
Active range of motion is a part of a restorative nursing program. Active range of motion will promote strength, range of motion, and independence with activities of daily living.

DIF: Applying/Application REF: 96
KEY: Rehabilitation care| exercise
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse plans care for a client who is bedridden. Which assessment should the nurse complete to ensure to prevent pressure ulcer formation?
a. Nutritional intake and serum albumin levels

b. Pressure ulcer diameter and depth
c. Wound drainage, including color, odor, and consistency
d. Dressing site and antibiotic ointment application

ANS: A
Assessing serum albumin levels helps determine the clients nutritional status and allows care providers to alter the diet, as needed, to prevent pressure ulcers. All other options are treatment oriented rather than prevention oriented.

DIF: Applying/Application REF: 97
KEY: Rehabilitation care| skin breakdown
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. A nurse teaches a client about performing intermittent self-catheterization. The client states, I am not sure if I will be able to afford these catheters. How should the nurse respond?
a. I will try to find out whether you qualify for money to purchase these necessary supplies.
b. Even though it is expensive, the cost of taking care of urinary tract infections would be even higher.
c. Instead of purchasing new catheters, you can boil the catheters and reuse them up to 10 times each.
d. You can reuse the catheters at home. Clean technique, rather than sterile technique, is acceptable.

ANS: D
At home, clean technique for intermittent self-catheterization is sufficient to prevent cystitis and other urinary tract infections. The nurse would refer the client to the social worker to explore financial concerns. The nurse should not threaten the client, nor should the client be instructed to boil the catheters.

DIF: Applying/Application REF: 98
KEY: Rehabilitation care| elimination MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

9. A nurse delegates the ambulation of an older adult client to an unlicensed nursing assistant (UAP). Which statement should the nurse include when delegating this task?
a. The client has skid-proof socks, so there is no need to use your gait belt.
b. Teach the client how to use the walker while you are ambulating up the hall.
c. Sit the client on the edge of the bed with legs dangling before ambulating.
d. Ask the client if pain medication is needed before you walk the client in the hall.

ANS: C
Before the client gets out of bed, have the client sit on the bed with legs dangling on the side. This will enhance safety for the client. A gait belt should be used for all clients. The UAP cannot teach the client to use a walker or assess the clients pain.

DIF: Applying/Application REF: 93
KEY: Rehabilitation care| exercise| delegation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A nurse assesses a client who is admitted with hip problems. The client asks, Why are you asking about my bowels and bladder? How should the nurse respond?
a. To plan your care based on your normal elimination routine.
b. So we can help prevent side effects of your medications.
c. We need to evaluate your ability to function independently.
d. To schedule your activities around your elimination pattern.

ANS: A
Bowel elimination varies from client to client and must be evaluated on the basis of the clients normal routine. The nurse asks about bowel and bladder habits to develop a client-centered plan of care. The other answers are correct but are not the best responses. Oral analgesics may cause constipation, but they do not interfere with bladder control. The client is in rehabilitation to assist his or her ability to function independently. Elimination

usually is scheduled around rehabilitation activities but should be taken into consideration when a plan of care is developed.

DIF: Applying/Application REF: 90
KEY: Rehabilitation care| elimination
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

11. A nurse is caring for a client who has a spinal cord injury at level T3. Which intervention should the nurse implement to assist with bladder dysfunction?
a. Insert an indwelling urinary catheter.
b. Stroke the medial aspect of the thigh.
c. Use the Cred maneuver every 3 hours.
d. Apply a Texas catheter with a leg bag.

ANS: C
Two techniques are used to facilitate voiding in a client with a flaccid bladder: the Valsalva maneuver and the Cred maneuver. Indwelling urinary catheters generally are not used because of the increased incidence of urinary tract infection. Stroking the medial aspect of the thigh facilitates voiding in clients with upper motor neuron problems. If the spinal cord injury is above T12, the client is unaware of a full bladder and does not void or is incontinent. Therefore, the client would not benefit from a Texas catheter with a leg bag.

DIF: Applying/Application REF: 98
KEY: Rehabilitation care| elimination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs: Physiological Integrity: Physiological Adaptation

12. A nurse teaches a client who has a flaccid bladder. Which bladder training technique should the nurse teach?
a. Stroking the medial aspect of the thigh
b. Valsalva maneuver
c. Self-catheterization
d. Frequent toileting

ANS: B
With a flaccid bladder, the voiding reflex arc is not intact and additional stimulation may be needed to initiate voiding, such as with the Valsalva and Cred maneuvers. Intermittent catheterization may be used after the previous maneuvers are attempted. In reflex bladder, the voiding arc is intact and voiding can be initiated by any stimulus, such as stroking the medial aspect of the thigh. A consistent toileting routine is used to re-establish voiding continence with an uninhibited bladder.

DIF: Applying/Application REF: 98
KEY: Rehabilitation care| elimination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. A rehabilitation nurse cares for a client who is wheelchair bound. Which intervention should the nurse implement to prevent skin breakdown?
a. Place pillows under the clients heels.
b. Have the client do wheelchair push-ups.
c. Perform wound care as prescribed.
d. Massage the clients calves and feet with lotion.

ANS: B
Clients who sit for prolonged periods in a wheelchair should perform wheelchair push-ups for at least 10 seconds every hour. Chair-bound clients also need to be re-positioned at least every 1 to 2 hours. The lower legs, where the wheelchair could rub against the legs, also need to be assessed. Pillows under the heels could exert pressure on the heels; it is better to place the pillow under the ankle. Performing wound care as prescribed is important to improve the healing of pressure ulcers, but this intervention will not prevent skin

breakdown. The calves of a client with no or decreased lower extremity mobility should not be massaged because of the risk of embolization or thrombus.

DIF: Applying/Application REF: 97
KEY: Rehabilitation care| exercise| skin breakdown
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

14. A nurse assists a client with left-sided weakness to walk with a cane. What is the correct order of steps for gait training with a cane?
1. Apply a transfer belt around the clients waist.
2. Move the cane and left leg forward at the same time.
3. Guide the client to a standing position.
4. Move the right leg one step forward.
5. Place the cane in the clients right hand.
6. Check balance and repeat the sequence.
a. 3, 1, 5, 4, 2, 6
b. 1, 3, 5, 2, 4, 6
c. 5, 3, 1, 2, 4, 6
d. 3, 5, 1, 4, 2, 6

ANS: B
To ambulate a client with a cane, the nurse should first apply a transfer belt around the clients waist, then guide the client to a standing position and place the cane in the clients strong hand. Next the nurse should assist the client to move the cane and weaker leg forward together. Then move the stronger leg forward and check balance before repeating the sequence.

DIF: Remembering/Knowledge REF: 95
KEY: Rehabilitation care| exercise
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

MULTIPLE RESPONSE

1. A nurse collaborates with an occupational therapist when providing care for a rehabilitation client. With which activities should the occupational therapist assist the client? (Select all that apply.)
a. Achieving mobility
b. Attaining independence with dressing
c. Using a walker in public
d. Learning techniques for transferring
e. Performing activities of daily living (ADLs)
f. Completing job training

ANS: B, E
The role of the occupational therapist is to assist the client with ADLs, dressing, and activities needed for job training. The physical therapist assists with muscle strength development and ambulation. Vocational counselors assist with job placement, training, and further education.

DIF: Understanding/Comprehension REF: 88
KEY: Rehabilitation care| interdisciplinary team
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. An interdisciplinary team is caring for a client on a rehabilitation unit. Which team members are paired with the correct roles and responsibilities? (Select all that apply.)
a. Speech-language pathologist Evaluates and retrains clients with swallowing problems
b. Physical therapist Assists clients with ambulation and walker training
c. Recreational therapist Assists physical therapists to complete rehabilitation therapy
d. Vocational counselor Works with clients who have experienced head injuries

e. Registered dietitian Develops client-specific diets to ensure client needs are met

ANS: A, B, E
Speech-language pathologists evaluate and retrain clients with speech, language, or swallowing problems. Physical therapists help clients to achieve self-management by focusing on gross mobility. Registered dietitians develop client-specific diets to ensure that clients meet their needs for nutrition. Recreational therapists work to help clients continue or develop hobbies or interests. Vocational counselors assist with job placement, training, or further education.

DIF: Remembering/Knowledge REF: 89
KEY: Rehabilitation care| interdisciplinary team
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A rehabilitation nurse is caring for an older adult client who states, I tire easily. How should the nurse respond? (Select all that apply.)
a. Schedule all of your tasks for the morning when you have the most energy.
b. Use a cart to push your belongings instead of carrying them.
c. Your family should hire someone who can assist you with daily chores.
d. Plan to gather all of the supplies needed for a chore prior to starting the activity.
e. Try to break large activities into smaller parts to allow rest periods between activities.

ANS: B, D, E
A cart is useful because it takes less energy to push items than to carry them. Gathering equipment before performing a chore decreases unneeded steps. Breaking larger chores into smaller ones allows rest periods between activities and still gives the client a sense of completion even if the client is unable to complete the whole task. Major tasks should be performed in the morning, when energy levels are high, while lesser tasks should be done throughout the day after frequent rest periods. Someone should be hired to do the chores only if the client cannot do them. The outcome should be achieving independence as close to the pre-disability level as possible.

DIF: Applying/Application REF: 96
KEY: Rehabilitation care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse is caring for clients as a member of the rehabilitation team. Which activities should the nurse complete as part of the nurses role? (Select all that apply.)
a. Maintain the safety of adaptive devices by monitoring their function and making repairs.
b. Coordinate rehabilitation team activities to ensure implementation of the plan of care.
c. Assist clients to identify support services and resources for the coordination of services.
d. Counsel clients and family members on strategies to cope with disability.
e. Support the clients choices by acting as an advocate for the client and family.

ANS: B, E
The rehabilitation nurses role includes coordination of rehabilitation activities to ensure the clients plan of care is effectively implemented and advocating for the client and family. The biomedical technician monitors and repairs adaptive and electronic devices. The social worker assists clients with support services and resources. The clinical psychologist counsels clients and families on their psychological problems and on strategies to cope with disability.

DIF: Understanding/Comprehension REF: 88
KEY: Rehabilitation care| interdisciplinary team
MSC: Integrated Process: Nursing Process: Implementation

Chapter 07: End-of-Life Care

MULTIPLE CHOICE

1. A nurse cares for a dying client. Which manifestation of dying should the nurse treat first?
a. Anorexia
b. Pain
c. Nausea
d. Hair loss

ANS: B
Only symptoms that cause distress for a dying client should be treated. Such symptoms include pain, nausea and vomiting, dyspnea, and agitation. These problems interfere with the clients comfort. Even when symptoms, such as anorexia or hair loss, disturb the family, they should be treated only if the client is distressed by their presence. The nurse should treat the clients pain first.

DIF: Applying/Application REF: 109
KEY: End-of-life care| advance directives
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse plans care for a client who is nearing end of life. Which question should the nurse ask when developing this clients plan of care?
a. Is your advance directive up to date and notarized?
b. Do you want to be at home at the end of your life?
c. Would you like a physical therapist to assist you with range-of-motion activities?
d. Have your children discussed resuscitation with your health care provider?

ANS: B
When developing a plan of care for a dying client, consideration should be given for where the client wants to die. Advance directives do not need to be notarized. A physical therapist would not be involved in end-of-life care. The client should discuss resuscitation with the health care provider and children; do-not-resuscitate status should be the clients decision, not the familys decision.

DIF: Applying/Application REF: 106
KEY: End-of-life care| advance directives
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

3. A nurse is caring for a client who has lung cancer and is dying. Which prescription should the nurse question?
a. Morphine 10 mg sublingual every 6 hours PRN for pain level greater than 5
b. Albuterol (Proventil) metered dose inhaler every 4 hours PRN for wheezes
c. Atropine solution 1% sublingual every 4 hours PRN for excessive oral secretions
d. Sodium biphosphate (Fleet) enema once a day PRN for impacted stool

ANS: A
Pain medications should be scheduled around the clock to maintain comfort and prevent reoccurrence of pain. The other medications are appropriate for this client.

DIF: Applying/Application REF: 108
KEY: End-of-life care| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A client tells the nurse that, even though it has been 4 months since her sisters death, she frequently finds herself crying uncontrollably. How should the nurse respond?
a. Most people move on within a few months. You should see a grief counselor.
b. Whenever you start to cry, distract yourself from thoughts of your sister.

c. You should try not to cry. Im sure your sister is in a better place now.
d. Your feelings are completely normal and may continue for a long time.

ANS: D
Frequent crying is not an abnormal response. The nurse should let the client know that this is normal and okay. Although the client may benefit from talking with a grief counselor, it is not unusual for her to still be grieving after a few months. The other responses are not as therapeutic because they justify or minimize the clients response.

DIF: Applying/Application REF: 113
KEY: End-of-life care| coping MSC: Integrated Process: Caring

5. After teaching a client about advance directives, a nurse assesses the clients understanding. Which statement indicates the client correctly understands the teaching?
a. An advance directive will keep my children from selling my home when Im old.
b. An advance directive will be completed as soon as Im incapacitated and cant think for myself.
c. An advance directive will specify what I want done when I can no longer make decisions about health care.
d. An advance directive will allow me to keep my money out of the reach of my family.

ANS: C
An advance directive is a written document prepared by a competent individual that specifies what, if any, extraordinary actions a person would want taken when he or she can no longer make decisions about personal health care. It does not address issues such as the clients residence or financial matters.

DIF: Understanding/Comprehension REF: 104
KEY: End-of-life care| advance directives
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse teaches a client who is considering being admitted to hospice. Which statement should the nurse include in this clients teaching?
a. Hospice admission has specific criteria. You may not be a viable candidate, so we will look at alternative plans for your discharge.
b. Hospice care focuses on a holistic approach to health care. It is designed not to hasten death, but rather to relieve symptoms.
c. Hospice care will not help with your symptoms of depression. I will refer you to the facilitys counseling services instead.
d. You seem to be experiencing some difficulty with this stage of the grieving process. Lets talk about your feelings.

ANS: B
As both a philosophy and a system of care, hospice care uses an interdisciplinary approach to assess and address the holistic needs of clients and families to facilitate quality of life and a peaceful death. This holistic approach neither hastens nor postpones death but provides relief of symptoms experienced by the dying client.

DIF: Applying/Application REF: 106
KEY: End-of-life care| palliative/hospice care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

7. A nurse is caring for a dying client. The clients spouse states, I think he is choking to death. How should the nurse respond?
a. Do not worry. The choking sound is normal during the dying process.
b. I will administer more morphine to keep your husband comfortable.
c. I can ask the respiratory therapist to suction secretions out through his nose.
d. I will have another nurse assist me to turn your husband on his side.

ANS: D
The choking sound or death rattle is common in dying clients. The nurse should acknowledge the spouses

concerns and provide interventions that will reduce the choking sounds. Repositioning the client onto one side with a towel under the mouth to collect secretions is the best intervention. The nurse should not minimize the spouses concerns. Morphine will assist with comfort but will not decrease the choking sounds. Nasotracheal suctioning is not appropriate in a dying client.

DIF: Applying/Application REF: 111
KEY: End-of-life care
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

8. The nurse is teaching a family member about various types of complementary therapies that might be effective for relieving the dying clients anxiety and restlessness. Which statement made by the family member indicates understanding of the nurses teaching?
a. Maybe we should just hire an around-the-clock sitter to stay with Grandmother.
b. I have some of her favorite hymns on a CD that I could bring for music therapy.
c. I dont think that shell need pain medication along with her herbal treatments.
d. I will burn therapeutic incense in the room so we can stop the anxiety pills.

ANS: B
Music therapy is a complementary therapy that may produce relaxation by quieting the mind and removing a clients inner restlessness. Hiring an around-the-clock sitter does not demonstrate that the clients family understands complementary therapies. Complementary therapies are used in conjunction with traditional therapy. Complementary therapy would not replace pain or anxiety medication but may help decrease the need for these medications.

DIF: Applying/Application REF: 112
KEY: End-of-life care| nonpharmacologic pain management
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

9. A nurse is caring for a terminally ill client who has just died in a hospital setting with family members at the bedside. Which action should the nurse take first?
a. Call for emergency assistance so that resuscitation procedures can begin.
b. Ask family members if they would like to spend time alone with the client.
c. Ensure that a death certificate has been completed by the physician.
d. Request family members to prepare the clients body for the funeral home.

ANS: B
Before moving the clients body to the funeral home, the nurse should ask family members if they would like to be alone with the client. Emergency assistance will not be necessary. Although it is important to ensure that a death certificate has been completed before the client is moved to the mortuary, the nurse first should ask family members if they would like to be alone with the client. The clients family should not be expected to prepare the body for the funeral home.

DIF: Applying/Application REF: 114
KEY: End-of-life care| postmortem care MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

10. A nurse assesses a client who is dying. Which manifestation of a dying client should the nurse assess to determine whether the client is near death?
a. Level of consciousness
b. Respiratory rate
c. Bowel sounds
d. Pain level on a 0-to-10 scale

ANS: B
Although all of these assessments should be performed during the dying process, periods of apnea and Cheyne-Strokes respirations indicate death is near. As peripheral circulation decreases, the clients level of consciousness and bowel sounds decrease, and the client would be unable to provide a numeric number on a

pain scale. Even with these other symptoms, the nurse should continue to assess respiratory rate throughout the dying process. As the rate drops significantly and breathing becomes agonal, death is near.

DIF: Applying/Application REF: 107
KEY: End-of-life care
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse is caring for a client who is terminally ill. The clients spouse states, I am concerned because he does not want to eat. How should the nurse respond?
a. Let him know that food is available if he wants it, but do not insist that he eat.
b. A feeding tube can be placed in the nose to provide important nutrients.
c. Force him to eat even if he does not feel hungry, or he will die sooner.
d. He is getting all the nutrients he needs through his intravenous catheter.

ANS: A
When family members understand that the client is not suffering from hunger and is not starving to death, they may allow the client to determine when, what, or if to eat. Often, as death approaches, metabolic needs decrease and clients do not feel the sensation of hunger. Forcing them to eat frustrates the client and the family.

DIF: Applying/Application REF: 108
KEY: End-of-life care| nutrition MSC: Integrated Process: Caring

12. A nurse discusses inpatient hospice with a client and the clients family. A family member expresses concern that her loved one will receive only custodial care. How should the nurse respond?
a. The goal of palliative care is to provide the greatest degree of comfort possible and help the dying person enjoy whatever time is left.
b. Palliative care will release you from the burden of having to care for someone in the home. It does not mean that curative treatment will stop.
c. A palliative care facility is like a nursing home and costs less than a hospital because only pain medications are given.
d. Your relative is unaware of her surroundings and will not notice the difference between her home and a palliative care facility.

ANS: A
Palliative care provides an increased level of personal care designed to manage symptom distress. The focus is on pain control and helping the relative die with dignity.

DIF: Understanding/Comprehension REF: 106
KEY: End-of-life care| palliative/hospice care
MSC: Integrated Process: Caring NOT: Client Needs: Psychosocial Integrity

13. An intensive care nurse discusses withdrawal of care with a clients family. The family expresses concerns related to discontinuation of therapy. How should the nurse respond?
a. I understand your concerns, but in this state, discontinuation of care is not a form of active euthanasia.
b. You will need to talk to the provider because I am not legally allowed to participate in the withdrawal of life support.
c. I realize this is a difficult decision. Discontinuation of therapy will allow the client to die a natural death.
d. There is no need to worry. Most religious organizations support the clients decision to stop medical treatment.

ANS: C
The nurse should validate the familys concerns and provide accurate information about the discontinuation of therapy. The other statements address specific issues related to the withdrawal of care but do not provide appropriate information about their purpose. If the clients family asks for specific information about euthanasia, legal, or religious issues, the nurse should provide unbiased information about these topics.

DIF: Applying/Application REF: 115
KEY: End-of-life care| withdrawal of care

MSC: Integrated Process: Caring NOT: Client Needs: Psychosocial Integrity

14. A hospice nurse is caring for a variety of clients who are dying. Which end-of-life and death ritual is paired with the correct religion?
a. Roman Catholic Autopsies are not allowed except under special circumstances.
b. Christian Upon death, a religious leader should perform rituals of bathing and wrapping the body in cloth.
c. Judaism A person who is extremely ill and dying should not be left alone.
d. Islam An ill or dying person should receive the Sacrament of the Sick.

ANS: C
According to Jewish law, a person who is extremely ill or dying should not be left alone. Orthodox Jews do not allow autopsies except under special circumstances. The Islamic faith requires a religious leader to perform rituals of bathing and wrapping the body in cloth upon death. A Catholic priest performs the Sacrament of the Sick for ill or dying people.

DIF: Remembering/Knowledge REF: 112
KEY: End-of-life care| religion/spirituality
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

MULTIPLE RESPONSE

1. A hospice nurse is caring for a dying client and her family members. Which interventions should the nurse implement? (Select all that apply.)
a. Teach family members about physical signs of impending death.
b. Encourage the management of adverse symptoms.
c. Assist family members by offering an explanation for their loss.
d. Encourage reminiscence by both client and family members.
e. Avoid spirituality because the clients and the nurses beliefs may not be congruent.

ANS: A, B, D
The nurse should teach family members about the physical signs of death, because family members often become upset when they see physiologic changes in their loved one. Palliative care includes management of symptoms so that the peaceful death of the client is facilitated. Reminiscence will help both the client and family members cope with the dying process. The nurse is not expected to explain why this is happening to the familys loved one. The nurse can encourage spirituality if the client is agreeable, regardless of whether the clients religion is the same.

DIF: Applying/Application REF: 108
KEY: End-of-life care
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse admits an older adult client to the hospital. Which criterion should the nurse use to determine if the client can make his own medical decisions? (Select all that apply.)
a. Can communicate his treatment preferences
b. Is able to read and write at an eighth-grade level
c. Is oriented enough to understand information provided
d. Can evaluate and deliberate information
e. Has completed an advance directive

ANS: A, C, D
To have decision-making ability, a person must be able to perform three tasks: receive information (but not necessarily oriented 4); evaluate, deliberate, and mentally manipulate information; and communicate a treatment preference. The client does not have to read or write at a specific level. Education can be provided at the clients level so that he can make the necessary decisions. The client does not need to complete an advance directive to make his own medical decisions. An advance directive will be necessary if he wants to designate someone to make medical decisions when he is unable to.

DIF: Remembering/Knowledge REF: 104
KEY: Advance directives
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A hospice nurse plans care for a client who is experiencing pain. Which complementary therapies should the nurse incorporate in this clients pain management plan? (Select all that apply.)
a. Play music that the client enjoys.
b. Massage tissue that is tender from radiation therapy.
c. Rub lavender lotion on the clients feet.
d. Ambulate the client in the hall twice a day.
e. Administer intravenous morphine.

ANS: A, C
Complementary therapies for pain management include massage therapy, music therapy, Therapeutic Touch, and aromatherapy. Nurses should not massage over sites of tissue damage from radiation therapy. Ambulation and intravenous morphine are not complementary therapies for pain management.

DIF: Understanding/Comprehension REF: 109
KEY: Advance directives
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs: Physiological Integrity: Basic Care and Comfort

4. A nurse teaches a clients family members about signs and symptoms of approaching death. Which manifestations should the nurse include in this teaching? (Select all that apply.)
a. Warm and flushed extremities
b. Long periods of insomnia
c. Increased respiratory rate
d. Decreased appetite
e. Congestion and gurgling

ANS: D, E
Common physical signs and symptoms of approaching death including coolness of extremities, increased sleeping, irregular and slowed breathing rate, a decrease in fluid and food intake, congestion and gurgling, incontinence, disorientation, and restlessness.

DIF: Remembering/Knowledge REF: 108
KEY: End-of-life care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 08: Concepts of Emergency and Trauma Nursing

MULTIPLE CHOICE

1. An emergency room nurse assesses a client who has been raped. With which health care team member should the nurse collaborate when planning this clients care?
a. Emergency medicine physician
b. Case manager
c. Forensic nurse examiner
d. Psychiatric crisis nurse

ANS: C
All other members of the health care team listed may be used in the management of this clients care. However, the forensic nurse examiner is educated to obtain client histories and collect evidence dealing with the assault, and can offer the counseling and follow-up needed when dealing with the victim of an assault.

DIF: Understanding/Comprehension REF: 118
KEY: Interdisciplinary team| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. The emergency department team is performing cardiopulmonary resuscitation on a client when the clients spouse arrives at the emergency department. Which action should the nurse take first?
a. Request that the clients spouse sit in the waiting room.
b. Ask the spouse if he wishes to be present during the resuscitation.
c. Suggest that the spouse begin to pray for the client.
d. Refer the clients spouse to the hospitals crisis team.

ANS: B
If resuscitation efforts are still under way when the family arrives, one or two family members may be given the opportunity to be present during lifesaving procedures. The other options do not give the spouse the opportunity to be present for the client or to begin to have closure.

DIF: Applying/Application REF: 126
KEY: Death| emergency nursing MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

3. An emergency room nurse is triaging victims of a multi-casualty event. Which client should receive care first?
a. A 30-year-old distraught mother holding her crying child
b. A 65-year-old conscious male with a head laceration
c. A 26-year-old male who has pale, cool, clammy skin
d. A 48-year-old with a simple fracture of the lower leg

ANS: C
The client with pale, cool, clammy skin is in shock and needs immediate medical attention. The mother does not have injuries and so would be the lowest priority. The other two people need medical attention soon, but not at the expense of a person in shock.

DIF: Applying/Application REF: 129
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. While triaging clients in a crowded emergency department, a nurse assesses a client who presents with symptoms of tuberculosis. Which action should the nurse take first?
a. Apply oxygen via nasal cannula.
b. Administer intravenous 0.9% saline solution.
c. Transfer the client to a negative-pressure room.

d. Obtain a sputum culture and sensitivity.

ANS: C
A client with signs and symptoms of tuberculosis or other airborne pathogens should be placed in a negative-pressure room to prevent contamination of staff, clients, and family members in the crowded emergency department.

DIF: Applying/Application REF: 120
KEY: Infection control| Transmission-Based Precautions| emergency nursing| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A nurse is triaging clients in the emergency department (ED). Which client should the nurse prioritize to receive care first?
a. A 22-year-old with a painful and swollen right wrist
b. A 45-year-old reporting chest pain and diaphoresis
c. A 60-year-old reporting difficulty swallowing and nausea
d. An 81-year-old with a respiratory rate of 28 breaths/min and a temperature of 101 F

ANS: B
A client experiencing chest pain and diaphoresis would be classified as emergent and would be triaged immediately to a treatment room in the ED. The other clients are more stable.

DIF: Applying/Application REF: 123
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse is evaluating levels and functions of trauma centers. Which function is appropriately paired with the level of the trauma center?
a. Level I Located within remote areas and provides advanced life support within resource capabilities
b. Level II Located within community hospitals and provides care to most injured clients
c. Level III Located in rural communities and provides only basic care to clients
d. Level IV Located in large teaching hospitals and provides a full continuum of trauma care for all clients

ANS: B
Level I trauma centers are usually located in large teaching hospital systems and provide a full continuum of trauma care for all clients. Both Level II and Level III facilities are usually located in community hospitals. These trauma centers provide care for most clients and transport to Level I centers when client needs exceed resource capabilities. Level IV trauma centers are usually located in rural and remote areas. These centers provide basic care, stabilization, and advanced life support while transfer arrangements to higher-level trauma centers are made.

DIF: Remembering/Knowledge REF: 127
KEY: Trauma center| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. Emergency medical technicians arrive at the emergency department with an unresponsive client who has an oxygen mask in place. Which action should the nurse take first?
a. Assess that the client is breathing adequately.
b. Insert a large-bore intravenous line.
c. Place the client on a cardiac monitor.
d. Assess for the best neurologic response.

ANS: A
The highest-priority intervention in the primary survey is to establish that the client is breathing adequately. Even though this client has an oxygen mask on, he or she may not be breathing, or may be breathing inadequately with the device in place.

DIF: Applying/Application REF: 128
KEY: Primary survey| emergency nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A trauma client with multiple open wounds is brought to the emergency department in cardiac arrest. Which action should the nurse take prior to providing advanced cardiac life support?
a. Contact the on-call orthopedic surgeon.
b. Don personal protective equipment.
c. Notify the Rapid Response Team.
d. Obtain a complete history from the paramedic.

ANS: B
Nurses must recognize and plan for a high risk of contamination with blood and body fluids when engaging in trauma resuscitation. Standard Precautions should be taken in all resuscitation situations and at other times when exposure to blood and body fluids is likely. Proper attire consists of an impervious cover gown, gloves, eye protection, a facemask, a surgical cap, and shoe covers.

DIF: Applying/Application REF: 128
KEY: Infection control| Standard Precautions| emergency nursing| staff safety
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A nurse is triaging clients in the emergency department. Which client should be considered urgent?
a. A 20-year-old female with a chest stab wound and tachycardia
b. A 45-year-old homeless man with a skin rash and sore throat
c. A 75-year-old female with a cough and a temperature of 102 F
d. A 50-year-old male with new-onset confusion and slurred speech

ANS: C
A client with a cough and a temperature of 102 F is urgent. This client is at risk for deterioration and needs to be seen quickly, but is not in an immediately life-threatening situation. The client with a chest stab wound and tachycardia and the client with new-onset confusion and slurred speech should be triaged as emergent. The client with a skin rash and a sore throat is not at risk for deterioration and would be triaged as nonurgent.

DIF: Applying/Application REF: 124
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. An emergency department nurse is caring for a client who has died from a suspected homicide. Which action should the nurse take?
a. Remove all tubes and wires in preparation for the medical examiner.
b. Limit the number of visitors to minimize the familys trauma.
c. Consult the bereavement committee to follow up with the grieving family.
d. Communicate the clients death to the family in a simple and concrete manner.

ANS: D
When dealing with clients and families in crisis, communicate in a simple and concrete manner to minimize confusion. Tubes must remain in place for the medical examiner. Family should be allowed to view the body. Offering to call for additional family support during the crisis is suggested. The bereavement committee should be consulted, but this is not the priority at this time.

DIF: Applying/Application REF: 126
KEY: Death| emergency nursing MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

11. An emergency department (ED) case manager is consulted for a client who is homeless. Which intervention should the case manager provide?

a. Communicate client needs and restrictions to support staff.
b. Prescribe low-cost antibiotics to treat community-acquired infection.
c. Provide referrals to subsidized community-based health clinics.
d. Offer counseling for substance abuse and mental health disorders.

ANS: C
Case management interventions include facilitating referrals to primary care providers who are accepting new clients or to subsidized community-based health clinics for clients or families in need of routine services. The ED nurse is accountable for communicating pertinent staff considerations, client needs, and restrictions to support staff (e.g., physical limitations, isolation precautions) to ensure that ongoing client and staff safety issues are addressed. The ED physician prescribes medications and treatments. The psychiatric nurse team evaluates clients with emotional behaviors or mental illness and facilitates the follow-up treatment plan, including possible admission to an appropriate psychiatric facility.

DIF: Understanding/Comprehension REF: 126
KEY: Interdisciplinary team| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12. An emergency department nurse is caring for a client who is homeless. Which action should the nurse take to gain the clients trust?
a. Speak in a quiet and monotone voice.
b. Avoid eye contact with the client.
c. Listen to the clients concerns and needs.
d. Ask security to store the clients belongings.

ANS: C
To demonstrate behaviors that promote trust with homeless clients, the emergency room nurse should make eye contact (if culturally appropriate), speak calmly, avoid any prejudicial or stereotypical remarks, show genuine care and concern by listening, and follow through on promises. The nurse should also respect the clients belongings and personal space.

DIF: Understanding/Comprehension REF: 126
KEY: Interdisciplinary team| emergency nursing| case management
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A nurse is triaging clients in the emergency department. Which client should the nurse classify as nonurgent?
a. A 44-year-old with chest pain and diaphoresis
b. A 50-year-old with chest trauma and absent breath sounds
c. A 62-year-old with a simple fracture of the left arm
d. A 79-year-old with a temperature of 104 F

ANS: C
A client in a nonurgent category can tolerate waiting several hours for health care services without a significant risk of clinical deterioration. The client with a simple arm fracture and palpable radial pulses is currently stable, is not at significant risk of clinical deterioration, and would be considered nonurgent. The client with chest pain and diaphoresis and the client with chest trauma are emergent owing to the potential for clinical deterioration and would be seen immediately. The client with a high fever may be stable now but also has a risk of deterioration.

DIF: Applying/Application REF: 123
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse is caring for clients in a busy emergency department. Which actions should the nurse take to ensure client and staff safety? (Select all that apply.)
a. Leave the stretcher in the lowest position with rails down so that the client can access the bathroom.
b. Use two identifiers before each intervention and before mediation administration.
c. Attempt de-escalation strategies for clients who demonstrate aggressive behaviors.
d. Search the belongings of clients with altered mental status to gain essential medical information.
e. Isolate clients who have immune suppression disorders to prevent hospital-acquired infections.

ANS: B, C, D
To ensure client and staff safety, nurses should use two identifiers per The Joint Commissions National Patient Safety Goals; follow the hospitals security plan, including de-escalation strategies for people who demonstrate aggressive or violent tendencies; and search belongings to identify essential medical information. Nurses should also use standard fall prevention interventions, including leaving stretchers in the lowest position with rails up, and isolating clients who present with signs and symptoms of contagious infectious disorders.

DIF: Applying/Application REF: 120
KEY: Safety| patient safety| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. An emergency department (ED) nurse is preparing to transfer a client to the trauma intensive care unit. Which information should the nurse include in the nurse-to-nurse hand-off report? (Select all that apply.)
a. Mechanism of injury
b. Diagnostic test results
c. Immunizations
d. List of home medications
e. Isolation precautions

ANS: A, B, E
Hand-off communication should be comprehensive so that the receiving nurse can continue care for the client fluidly. Communication should be concise and should include only the most essential information for a safe transition in care. Hand-off communication should include the clients situation (reason for being in the ED), brief medical history, assessment and diagnostic findings, Transmission-Based Precautions needed, interventions provided, and response to those interventions.

DIF: Applying/Application REF: 120
KEY: SBAR| hand-off communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. An emergency room nurse is caring for a trauma client. Which interventions should the nurse perform during the primary survey? (Select all that apply.)
a. Foley catheterization
b. Needle decompression
c. Initiating IV fluids
d. Splinting open fractures
e. Endotracheal intubation
f. Removing wet clothing
g. Laceration repair

ANS: B, C, E, F
The primary survey for a trauma client organizes the approach to the client so that life-threatening injuries are rapidly identified and managed. The primary survey is based on the standard mnemonic ABC, with an added D and E: Airway and cervical spine control; Breathing; Circulation; Disability; and Exposure. After the completion of primary diagnostic and laboratory studies, and the insertion of gastric and urinary tubes, the secondary survey (a complete head-to-toe assessment) can be carried out.

DIF: Applying/Application REF: 127
KEY: Primary survey| emergency nursing

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. The complex care provided during an emergency requires interdisciplinary collaboration. Which interdisciplinary team members are paired with the correct responsibilities? (Select all that apply.)
a. Psychiatric crisis nurse Interacts with clients and families when sudden illness, serious injury, or death of a loved one may cause a crisis
b. Forensic nurse examiner Performs rapid assessments to ensure clients with the highest acuity receive the quickest evaluation, treatment, and prioritization of resources
c. Triage nurse Provides basic life support interventions such as oxygen, basic wound care, splinting, spinal immobilization, and monitoring of vital signs
d. Emergency medical technician Obtains client histories, collects evidence, and offers counseling and follow-up care for victims of rape, child abuse, and domestic violence
e. Paramedic Provides prehospital advanced life support, including cardiac monitoring, advanced airway management, and medication administration

ANS: A, E
The psychiatric crisis nurse evaluates clients with emotional behaviors or mental illness and facilitates follow-up treatment plans. The psychiatric crisis nurse also works with clients and families when experiencing a crisis. Paramedics are advanced life support providers who can perform advanced techniques that may include cardiac monitoring, advanced airway management and intubation, establishing IV access, and administering drugs en route to the emergency department. The forensic nurse examiner is trained to recognize evidence of abuse and to intervene on the clients behalf. The forensic nurse examiner will obtain client histories, collect evidence, and offer counseling and follow-up care for victims of rape, child abuse, and domestic violence. The triage nurse performs rapid assessments to ensure clients with the highest acuity receive the quickest evaluation, treatment, and prioritization of resources. The emergency medical technician is usually the first caregiver and provides basic life support and transportation to the emergency department.

DIF: Understanding/Comprehension REF: 118
KEY: Interdisciplinary team| emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse prepares to discharge an older adult client home from the emergency department (ED). Which actions should the nurse take to prevent future ED visits? (Select all that apply.)
a. Provide medical supplies to the family.
b. Consult a home health agency.
c. Encourage participation in community activities.
d. Screen for depression and suicide.
e. Complete a functional assessment.

ANS: D, E
Due to the high rate of suicide among older adults, a nurse should assess all older adults for depression and suicide. The nurse should also screen older adults for functional assessment, cognitive assessment, and risk for falls to prevent future ED visits.

DIF: Understanding/Comprehension REF: 124
KEY: Discharge planning| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 09: Care of Patients with Common Environmental Emergencies

MULTIPLE CHOICE

1. On a hot humid day, an emergency department nurse is caring for a client who is confused and has these vital signs: temperature 104.1 F (40.1 C), pulse 132 beats/min, respirations 26 breaths/min, blood pressure 106/66 mm Hg. Which action should the nurse take?
a. Encourage the client to drink cool water or sports drinks.
b. Start an intravenous line and infuse 0.9% saline solution.
c. Administer acetaminophen (Tylenol) 650 mg orally.
d. Encourage rest and re-assess in 15 minutes.

ANS: B
The client demonstrates signs of heat stroke. This is a medical emergency and priority care includes oxygen therapy, IV infusion with 0.9% saline solution, insertion of a urinary catheter, and aggressive interventions to cool the client, including external cooling and internal cooling methods. Oral hydration would not be appropriate for a client who has symptoms of heat stroke because oral fluids would not provide necessary rapid rehydration, and the confused client would be at risk for aspiration. Acetaminophen would not decrease this clients temperature or improve the clients symptoms. The client needs immediate medical treatment; therefore, rest and re-assessing in 15 minutes is inappropriate.

DIF: Applying/Application REF: 134
KEY: Heat-related illness| environmental emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. While at a public park, a nurse encounters a person immediately after a bee sting. The persons lips are swollen, and wheezes are audible. Which action should the nurse take first?
a. Elevate the site and notify the persons next of kin.
b. Remove the stinger with tweezers and encourage rest.
c. Administer diphenhydramine (Benadryl) and apply ice.
d. Administer an EpiPen from the first aid kit and call 911.

ANS: D
The clients swollen lips indicate that anaphylaxis may be developing, and this is a medical emergency. 911 should be called immediately, and the client transported to the emergency department as quickly as possible. If an EpiPen is available, it should be administered at the first sign of an anaphylactic reaction. The other answers do not provide adequate interventions to treat airway obstruction due to anaphylaxis.

DIF: Applying/Application REF: 142
KEY: Bee and insect sting| anaphylaxis| environmental emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A client presents to the emergency department after prolonged exposure to the cold. The client is difficult to arouse and speech is incoherent. Which action should the nurse take first?
a. Reposition the client into a prone position.
b. Administer warmed intravenous fluids to the client.
c. Wrap the clients extremities in warm blankets.
d. Initiate extracorporeal rewarming via hemodialysis.

ANS: B
Moderate hypothermia manifests with muscle weakness, increased loss of coordination, acute confusion, apathy, incoherence, stupor, and impaired clotting. Moderate hypothermia should be treated by core rewarming methods, which include administration of warm IV fluids, heated oxygen, and heated peritoneal, pleural, gastric, or bladder lavage, and by positioning the client in a supine position to prevent orthostatic changes. The clients trunk should be warmed prior to the extremities to prevent peripheral vasodilation. Extracorporeal warming with cardiopulmonary bypass or hemodialysis is a treatment for severe hypothermia.

DIF: Applying/Application REF: 144
KEY: Cold-related illness| environmental emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. An emergency department nurse cares for a middle-aged mountain climber who is confused and exhibits bizarre behaviors. After administering oxygen, which priority intervention should the nurse implement?
a. Administer dexamethasone (Decadron).
b. Complete a minimental state examination.
c. Prepare the client for computed tomography of the brain.
d. Request a psychiatric consult.

ANS: A
The client is exhibiting signs of mountain sickness and high altitude cerebral edema (HACE). Dexamethasone (Decadron) reduces cerebral edema by acting as an anti-inflammatory in the central nervous system. The other interventions will not treat mountain sickness or HACE.

DIF: Applying/Application REF: 147
KEY: Altitude-related illness| environmental emergencies
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. An emergency department nurse assesses a client admitted after a lightning strike. Which assessment should the nurse complete first?
a. Electrocardiogram (ECG)
b. Wound inspection
c. Creatinine kinase
d. Computed tomography of head

ANS: A
Clients who survive an immediate lightning strike can have serious myocardial injury, which can be manifested by ECG and myocardial perfusion abnormalities. The nurse should prioritize the ECG. Other assessments should be completed but are not the priority.

DIF: Applying/Application REF: 143
KEY: Lightning injuries| environmental emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse teaches a community health class about water safety. Which statement by a participant indicates that additional teaching is needed?
a. I can go swimming all by myself because I am a certified lifeguard.
b. I cannot leave my toddler alone in the bathtub for even a minute.
c. I will appoint one adult to supervise the pool at all times during a party.
d. I will make sure that there is a phone near my pool in case of an emergency.

ANS: A
People should never swim alone, regardless of lifeguard status. The other statements indicate good understanding of the teaching.

DIF: Analyzing/Analysis REF: 148
KEY: Drowning| environmental emergencies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A provider prescribes a rewarming bath for a client who presents with partial-thickness frostbite. Which action should the nurse take prior to starting this treatment?
a. Administer intravenous morphine.
b. Wrap the limb with a compression dressing.

c. Massage the frostbitten areas.
d. Assess the limb for compartment syndrome.

ANS: A
Rapid rewarming in a water bath is recommended for all instances of partial-thickness and full-thickness frostbite. Clients experience severe pain during the rewarming process and nurses should administer intravenous analgesics.

DIF: Applying/Application REF: 146
KEY: Cold-related illness| environmental emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. A nurse assesses a client recently bitten by a coral snake. Which assessment should the nurse complete first?
a. Unilateral peripheral swelling
b. Clotting times
c. Cardiopulmonary status
d. Electrocardiogram rhythm

ANS: C
Manifestations of coral snake envenomation are the result of its neurotoxic properties. The physiologic effect is to block neurotransmission, which produces ascending paralysis, reduced perception of pain, and, ultimately, respiratory paralysis. The nurse should monitor for respiratory rate and depth. Severe swelling and clotting problems do not occur with coral snakes but do occur with pit viper snakes. Electrocardiogram rhythm is not affected by neurotoxins.

DIF: Applying/Application REF: 137
KEY: Snakebite| environmental emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9. A nurse plans care for a client admitted with a snakebite to the right leg. With whom should the nurse collaborate?
a. The facilitys neurologist
b. The poison control center
c. The physical therapy department
d. A herpetologist (snake specialist)

ANS: B
For the client with a snakebite, the nurse should contact the regional poison control center immediately for specific advice on antivenom administration and client management.

DIF: Remembering/Knowledge REF: 137
KEY: Snakebite| poison control| environmental emergencies
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. While on a camping trip, a nurse cares for an adult client who had a drowning incident in a lake and is experiencing agonal breathing with a palpable pulse. Which action should the nurse take first?
a. Deliver rescue breaths.
b. Wrap the client in dry blankets.
c. Assess for signs of bleeding.
d. Check for a carotid pulse.

ANS: A
In this emergency situation, the nurse should immediately initiate airway clearance and ventilator support measures, including delivering rescue breaths.

DIF: Applying/Application REF: 148

KEY: Drowning| environmental emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse assesses a client admitted with a brown recluse spider bite. Which priority assessment should the nurse perform to identify complications of this bite?
a. Ask the client about pruritus at the bite site.
b. Inspect the bite site for a bluish purple vesicle.
c. Assess the extremity for redness and swelling.
d. Monitor the clients temperature every 4 hours.

ANS: D
Fever and chills indicate systemic toxicity, which can lead to hemolytic reactions, kidney failure, pulmonary edema, cardiovascular collapse, and death. Assessing for a fever should be the nurses priority. All other symptoms are normal for a brown recluse bite and should be assessed, but they do not provide information about complications from the bite, and therefore are not the priority.

DIF: Applying/Application REF: 139
KEY: Spider bite| environmental emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. A provider prescribes Crotalidae Polyvalent Immune Fab (CroFab) for a client who is admitted after being bitten by a pit viper snake. Which assessment should the nurse complete prior to administering this medication?
a. Assess temperature and for signs of fever.
b. Check the clients creatinine kinase level.
c. Ask about allergies to pineapple or papaya.
d. Inspect the skin for signs of urticaria (hives).

ANS: C
CroFab is an antivenom for pit viper snakebites. Clients should be assessed for hypersensitivity to bromelain (a pineapple derivative), papaya, and sheep protein prior to administration. During and after administration, the nurse should assess for urticaria, fever, and joint pain, which are signs of serum sickness.

DIF: Understanding/Comprehension REF: 138
KEY: Antivenom| snakebite| environmental emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A provider prescribes diazepam (Valium) to a client who was bitten by a black widow spider. The client asks, What is this medication for? How should the nurse respond?
a. This medication is an antivenom for this type of bite.
b. It will relieve your muscle rigidity and spasms.
c. It prevents respiratory difficulty from excessive secretions.
d. This medication will prevent respiratory failure.

ANS: B
Black widow spider venom produces a syndrome known as latrodectism, which manifests as severe abdominal pain, muscle rigidity and spasm, hypertension, and nausea and vomiting. Diazepam is a muscle relaxant that can relieve pain related to muscle rigidity and spasms. It does not prevent respiratory difficulty or failure.

DIF: Applying/Application REF: 140
KEY: Benzodiazepine| spider bite| environmental emergencies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14. After teaching a client how to prevent altitude-related illnesses, a nurse assesses the clients understanding. Which statement indicates the client needs additional teaching?

a. If my climbing partner cant think straight, we should descend to a lower altitude.
b. I will ask my provider about medications to help prevent acute mountain sickness.
c. My partner and I will plan to sleep at a higher elevation to acclimate more quickly.
d. I will drink plenty of fluids to stay hydrated while on the mountain.

ANS: C
Teaching to prevent altitude-related illness should include descending when symptoms start, staying hydrated, and taking acetazolamide (Diamox), which is commonly used to prevent and treat acute mountain sickness. The client should be taught to sleep at a lower elevation.

DIF: Applying/Application REF: 147
KEY: Altitude-related illness| environmental emergencies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

MULTIPLE RESPONSE

1. A nurse is teaching a wilderness survival class. Which statements should the nurse include about the prevention of hypothermia and frostbite? (Select all that apply.)
a. Wear synthetic clothing instead of cotton to keep your skin dry.
b. Drink plenty of fluids. Brandy can be used to keep your body warm.
c. Remove your hat when exercising to prevent the loss of heat.
d. Wear sunglasses to protect skin and eyes from harmful rays.
e. Know your physical limits. Come in out of the cold when limits are reached.

ANS: A, D, E
To prevent hypothermia and frostbite, the nurse should teach clients to wear synthetic clothing (which moves moisture away from the body and dries quickly), layer clothing, and wear a hat, facemask, sunscreen, and sunglasses. The client should also be taught to drink plenty of fluids, but to avoid alcohol when participating in winter activities. Clients should know their physical limits and come in out of the cold when these limits have been reached.

DIF: Applying/Application REF: 144
KEY: Cold-related illness| environmental emergencies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A nurse teaches a client who has severe allergies to prevent bug bites. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. Consult an exterminator to control bugs in and around your home.
b. Do not swat at insects or wasps.
c. Wear sandals whenever you go outside.
d. Keep your prescribed epinephrine auto-injector in a bedside drawer.
e. Use screens in your windows and doors to prevent flying insects from entering.

ANS: A, B, E
To prevent arthropod bites and stings, clients should wear protective clothing, cover garbage cans, use screens in windows and doors, inspect clothing and shoes before putting them on, consult an exterminator, remove nests, avoid swatting at insects, and carry a prescription epinephrine auto-injector at all times if they are known to be allergic to bee or wasp stings.

DIF: Applying/Application REF: 139
KEY: Bee and insect sting| environmental emergencies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A nurse is providing health education at a community center. Which instructions should the nurse include in teaching about prevention of lightning injuries during a storm? (Select all that apply.)
a. Seek shelter inside a building or vehicle.

b. Hide under a tall tree.
c. Do not take a bath or shower.
d. Turn off the television.
e. Remove all body piercings.
f. Put down golf clubs or gardening tools.

ANS: A, C, D, F
When thunder is heard, shelter should be sought in a safe area such as a building or an enclosed vehicle. Electrical equipment such as TVs and stereos should be turned off. Stay away from plumbing, water, and metal objects. Do not stand under an isolated tall tree or a structure such as a flagpole. Body piercings will not increase a persons chances of being struck by lightning.

DIF: Remembering/Knowledge REF: 143
KEY: Lightning injuries| environmental emergencies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. An emergency department nurse moves to a new city where heat-related illnesses are common. Which clients does the nurse anticipate being at higher risk for heat-related illnesses? (Select all that apply.)
a. Homeless individuals
b. Illicit drug users
c. White people
d. Hockey players
e. Older adults

ANS: A, B, E
Some of the most vulnerable, at-risk populations for heat-related illness include older adults; blacks (more than whites); people who work outside, such as construction and agricultural workers (more men than women); homeless people; illicit drug users (especially cocaine users); outdoor athletes (recreational and professional); and members of the military who are stationed in countries with hot climates (e.g., Iraq, Afghanistan).

DIF: Remembering/Knowledge REF: 133
KEY: Heat-related illness| environmental emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. An emergency department nurse plans care for a client who is admitted with heat stroke. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Administer oxygen via mask or nasal cannula.
b. Administer ibuprofen, an antipyretic medication.
c. Apply cooling techniques until core body temperature is less than 101 F.
d. Infuse 0.9% sodium chloride via a large-bore intravenous cannula.
e. Obtain baseline serum electrolytes and cardiac enzymes.

ANS: A, D, E
Heat stroke is a medical emergency. Oxygen therapy and intravenous fluids should be provided, and baseline laboratory tests should be performed as quickly as possible. The client should be cooled until core body temperature is reduced to 102 F. Antipyretics should not be administered.

DIF: Understanding/Comprehension REF: 136
KEY: Heat-related illness| environmental emergencies
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 10: Concepts of Emergency and Disaster Preparedness

MULTIPLE CHOICE

1. A hospital responds to a local mass casualty event. Which action should the nurse supervisor take to prevent staff post-traumatic stress disorder during a mass casualty event?
a. Provide water and healthy snacks for energy throughout the event.
b. Schedule 16-hour shifts to allow for greater rest between shifts.
c. Encourage counseling upon deactivation of the emergency response plan.
d. Assign staff to different roles and units within the medical facility.

ANS: A
To prevent staff post-traumatic stress disorder during a mass casualty event, the nurses should use available counseling, encourage and support co-workers, monitor each others stress level and performance, take breaks when needed, talk about feelings with staff and managers, and drink plenty of water and eat healthy snacks for energy. Nurses should also keep in touch with family, friends, and significant others, and not work for more than 12 hours per day. Encouraging counseling upon deactivation of the plan, or after the emergency response is over, does not prevent stress during the casualty event. Assigning staff to unfamiliar roles or units may increase situational stress and is not an approach to prevent post-traumatic stress disorder.

DIF: Remembering/Knowledge REF: 156
KEY: Post-traumatic stress disorder
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A client who is hospitalized with burns after losing the family home in a fire becomes angry and screams at a nurse when dinner is served late. How should the nurse respond?
a. Do you need something for pain right now?
b. Please stop yelling. I brought dinner as soon as I could.
c. I suggest that you get control of yourself.
d. You seem upset. I have time to talk if youd like.

ANS: D
Clients should be allowed to ventilate their feelings of anger and despair after a catastrophic event. The nurse establishes rapport through active listening and honest communication and by recognizing cues that the client wishes to talk. Asking whether the client is in pain as the first response closes the door to open communication and limits the clients options. Simply telling the client to stop yelling and to gain control does nothing to promote therapeutic communication.

DIF: Applying/Application REF: 157
KEY: Psychosocial response| crisis intervention
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

3. A nurse is field-triaging clients after an industrial accident. Which client condition should the nurse triage with a red tag?
a. Dislocated right hip and an open fracture of the right lower leg
b. Large contusion to the forehead and a bloody nose
c. Closed fracture of the right clavicle and arm numbness
d. Multiple fractured ribs and shortness of breath

ANS: D
Clients who have an immediate threat to life are given the highest priority, are placed in the emergent or class I category, and are given a red triage tag. The client with multiple rib fractures and shortness of breath most likely has developed a pneumothorax, which may be fatal if not treated immediately. The client with the hip and leg problem and the client with the clavicle fracture would be classified as class II; these major but stable injuries can wait 30 minutes to 2 hours for definitive care. The client with facial wounds would be considered the walking wounded and classified as nonurgent.

DIF: Analyzing/Analysis REF: 152
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. An emergency department (ED) charge nurse prepares to receive clients from a mass casualty within the community. What is the role of this nurse during the event?
a. Ask ED staff to discharge clients from the medical-surgical units in order to make room for critically injured victims.
b. Call additional medical-surgical and critical care nursing staff to come to the hospital to assist when victims are brought in.
c. Inform the incident commander at the mass casualty scene about how many victims may be handled by the ED.
d. Direct medical-surgical and critical care nurses to assist with clients currently in the ED while emergency staff prepare to receive the mass casualty victims.

ANS: D
The ED charge nurse should direct additional nursing staff to help care for current ED clients while the ED staff prepares to receive mass casualty victims; however, they should not be assigned to the most critically ill or injured clients. The house supervisor and unit directors would collaborate to discharge stable clients. The hospital incident commander is responsible for mobilizing resources and would have the responsibility for calling in staff. The medical command physician would be the person best able to communicate with on-scene personnel regarding the ability to take more clients.

DIF: Applying/Application REF: 155
KEY: Emergency nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. The hospital administration arranges for critical incident stress debriefing for the staff after a mass casualty incident. Which statement by the debriefing team leader is most appropriate for this situation?
a. You are free to express your feelings; whatever is said here stays here.
b. Lets evaluate what went wrong and develop policies for future incidents.
c. This session is only for nursing and medical staff, not for ancillary personnel.
d. Lets pass around the written policy compliance form for everyone.

ANS: A
Strict confidentiality during stress debriefing is essential so that staff members can feel comfortable sharing their feelings, which should be accepted unconditionally. Brainstorming improvements and discussing policies would occur during an administrative review. Any employee present during a mass casualty situation is eligible for critical incident stress management services.

DIF: Applying/Application REF: 156
KEY: Psychosocial response| crisis intervention
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

6. A nurse is caring for a client whose wife died in a recent mass casualty accident. The client says, I cant believe that my wife is gone and I am left to raise my children all by myself. How should the nurse respond?
a. Please accept my sympathies for your loss.
b. I can call the hospital chaplain if you wish.
c. You sound anxious about being a single parent.
d. At least your children still have you in their lives.

ANS: C
Therapeutic communication includes active listening and honesty. This statement demonstrates that the nurse recognizes the clients distress and has provided an opening for discussion. Extending sympathy and offering to call the chaplain do not give the client the opportunity to discuss feelings. Stating that the children still have one parent discounts the clients feelings and situation.

DIF: Applying/Application REF: 157
KEY: Psychosocial response| crisis intervention
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

7. A nurse cares for clients during a community-wide disaster drill. Once of the clients asks, Why are the individuals with black tags not receiving any care? How should the nurse respond?
a. To do the greatest good for the greatest number of people, it is necessary to sacrifice some.
b. Not everyone will survive a disaster, so it is best to identify those people early and move on.
c. In a disaster, extensive resources are not used for one person at the expense of many others.
d. With black tags, volunteers can identify those who are dying and can give them comfort care.

ANS: C
In a disaster, military-style triage is used; this approach identifies the dead or expectant dead with black tags. This practice helps to maintain the goal of triage, which is doing the most good for the most people. Precious resources are not used for those with overwhelming critical injury or illness, so that they can be allocated to others who have a reasonable expectation of survival. Clients are not sacrificed. Telling students to move on after identifying the expectant dead belittles their feelings and does not provide an adequate explanation. Clients are not black-tagged to allow volunteers to give comfort care.

DIF: Understanding/Comprehension REF: 152
KEY: Triage| emergency nursing MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. A nurse wants to become involved in community disaster preparedness and is interested in helping set up and staff first aid stations or community acute care centers in the event of a disaster. Which organization is the best fit for this nurses interests?
a. The Medical Reserve Corps
b. The National Guard
c. The health department
d. A Disaster Medical Assistance Team

ANS: A
The Medical Reserve Corps (MRC) consists of volunteer medical and public health care professionals who support the community during times of need. They may help staff hospitals, establish first aid stations or special needs shelters, or set up acute care centers in the community. The National Guard often performs search and rescue operations and law enforcement. The health department focuses on communicable disease tracking, treatment, and prevention. A Disaster Medical Assistance Team is deployed to a disaster area for up to 72 hours, providing many types of relief services.

DIF: Remembering/Knowledge REF: 153
KEY: Emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A nurse wants to become part of a Disaster Medical Assistance Team (DMAT) but is concerned about maintaining licensure in several different states. Which statement best addresses these concerns?
a. Deployed DMAT providers are federal employees, so their licenses are good in all 50 states.
b. The government has a program for quick licensure activation wherever you are deployed.
c. During a time of crisis, licensure issues would not be the governments priority concern.
d. If you are deployed, you will be issued a temporary license in the state in which you are working.

ANS: A
When deployed, DMAT health care providers are acting as agents of the federal government, and so are considered federal employees. Thus their licenses are valid in all 50 states. Licensure is an issue that the government would be concerned with, but no programs for temporary licensure or rapid activation are available.

DIF: Understanding/Comprehension REF: 153

KEY: Emergency nursing MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. After a hospitals emergency department (ED) has efficiently triaged, treated, and transferred clients from a community disaster to appropriate units, the hospital incident command officer wants to stand down from the emergency plan. Which question should the nursing supervisor ask at this time?
a. Are you sure no more victims are coming into the ED?
b. Do all areas of the hospital have the supplies and personnel they need?
c. Have all ED staff had the chance to eat and rest recently?
d. Does the Chief Medical Officer agree this disaster is under control?

ANS: B
Before standing down, the incident command officer ensures that the needs of the other hospital departments have been taken care of because they may still be stressed and may need continued support to keep functioning. Many more walking wounded victims may present to the ED; that number may not be predictable. Giving staff the chance to eat and rest is important, but all areas of the facility need that too. Although the Chief Medical Officer (CMO) may be involved in the incident, the CMO does not determine when the hospital can stand down.

DIF: Applying/Application REF: 156
KEY: Psychosocial response| crisis intervention
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A family in the emergency department is overwhelmed at the loss of several family members due to a shooting incident in the community. Which intervention should the nurse complete first?
a. Provide a calm location for the family to cope and discuss needs.
b. Call the hospital chaplain to stay with the family and pray for the deceased.
c. Do not allow visiting of the victims until the bodies are prepared.
d. Provide privacy for law enforcement to interview the family.

ANS: A
The nurse should first provide emotional support by encouraging relaxation, listening to the familys needs, and offering choices when appropriate and possible to give some personal control back to individuals. The family may or may not want the assistance of religious personnel; the nurse should assess for this before calling anyone. Visiting procedures should take into account the needs of the family. The family may want to see the victim immediately and do not want to wait until the body can be prepared. The nurse should assess the familys needs before assuming the body needs to be prepared first. The family may appreciate privacy, but this is not as important as assessing the familys needs.

DIF: Applying/Application REF: 157
KEY: Psychosocial response| crisis intervention
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

12. An emergency department charge nurse notes an increase in sick calls and bickering among the staff after a week with multiple trauma incidents. Which action should the nurse take?
a. Organize a pizza party for each shift.
b. Remind the staff of the facilitys sick-leave policy.
c. Arrange for critical incident stress debriefing.
d. Talk individually with staff members.

ANS: C
The staff may be suffering from critical incident stress and needs to have a debriefing by the critical incident stress management team to prevent the consequences of long-term, unabated stress. Speaking with staff members individually does not provide the same level of support as a group debriefing. Organizing a party and revisiting the sick-leave policy may be helpful, but are not as important and beneficial as a debriefing.

DIF: Applying/Application REF: 156

KEY: Psychosocial response| crisis intervention
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

MULTIPLE RESPONSE

1. Emergency medical services (EMS) brings a large number of clients to the emergency department following a mass casualty incident. The nurse identifies the clients with which injuries with yellow tags? (Select all that apply.)
a. Partial-thickness burns covering both legs
b. Open fractures of both legs with absent pedal pulses
c. Neck injury and numbness of both legs
d. Small pieces of shrapnel embedded in both eyes
e. Head injury and difficult to arouse
f. Bruising and pain in the right lower abdomen

ANS: A, C, D, F
Clients with burns, spine injuries, eye injuries, and stable abdominal injuries should be treated within 30 minutes to 2 hours, and therefore should be identified with yellow tags. The client with the open fractures and the client with the head injury would be classified as urgent with red tags.

DIF: Analyzing/Analysis REF: 152
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse triages clients arriving at the hospital after a mass casualty. Which clients are correctly classified? (Select all that apply.)
a. A 35-year-old female with severe chest pain: red tag
b. A 42-year-old male with full-thickness body burns: green tag
c. A 55-year-old female with a scalp laceration: black tag
d. A 60-year-old male with an open fracture with distal pulses: yellow tag
e. An 88-year-old male with shortness of breath and chest bruises: green tag

ANS: A, D
Red-tagged clients need immediate care due to life-threatening injuries. A client with severe chest pain would receive a red tag. Yellow-tagged clients have major injuries that should be treated within 30 minutes to 2 hours. A client with an open fracture with distal pulses would receive a yellow tag. The client with full-thickness body burns would receive a black tag. The client with a scalp laceration would receive a green tag, and the client with shortness of breath would receive a red tag.

DIF: Analyzing/Analysis REF: 152
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A hospital prepares to receive large numbers of casualties from a community disaster. Which clients should the nurse identify as appropriate for discharge or transfer to another facility? (Select all that apply.)
a. Older adult in the medical decision unit for evaluation of chest pain
b. Client who had open reduction and internal fixation of a femur fracture 3 days ago
c. Client admitted last night with community-acquired pneumonia
d. Infant who has a fever of unknown origin
e. Client on the medical unit for wound care

ANS: B, E
The client with the femur fracture could be transferred to a rehabilitation facility, and the client on the medical unit for wound care should be transferred home with home health or to a long-term care facility for ongoing wound care. The client in the medical decision unit should be identified for dismissal if diagnostic testing reveals a noncardiac source of chest pain. The newly admitted client with pneumonia would not be a good

choice because culture results are not yet available and antibiotics have not been administered long enough. The infant does not have a definitive diagnosis.

DIF: Applying/Application REF: 154
KEY: Triage| emergency nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A hospital prepares for a mass casualty event. Which functions are correctly paired with the personnel role? (Select all that apply.)
a. Paramedic Decides the number, acuity, and resource needs of clients
b. Hospital incident commander Assumes overall leadership for implementing the emergency plan
c. Public information officer Provides advanced life support during transportation to the hospital
d. Triage officer Rapidly evaluates each client to determine priorities for treatment
e. Medical command physician Serves as a liaison between the health care facility and the media

ANS: B, D
The hospital incident commander assumes overall leadership for implementing the emergency plan. The triage officer rapidly evaluates each client to determine priorities for treatment. The paramedic provides advanced life support during transportation to the hospital. The public information officer serves as a liaison between the health care facility and the media. The medical command physician decides the number, acuity, and resource needs of clients.

DIF: Remembering/Knowledge REF: 154
KEY: Emergency nursing| interdisciplinary team
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 11: Assessment and Care of Patients with Fluid and Electrolyte Imbalances

MULTIPLE CHOICE

1. A nurse teaches clients at a community center about risks for dehydration. Which client is at greatest risk for dehydration?
a. A 36-year-old who is prescribed long-term steroid therapy
b. A 55-year-old receiving hypertonic intravenous fluids
c. A 76-year-old who is cognitively impaired
d. An 83-year-old with congestive heart failure

ANS: C
Older adults, because they have less total body water than younger adults, are at greater risk for development of dehydration. Anyone who is cognitively impaired and cannot obtain fluids independently or cannot make his or her need for fluids known is at high risk for dehydration.

DIF: Understanding/Comprehension REF: 168
KEY: Hydration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

2. A nurse is caring for a client who exhibits dehydration-induced confusion. Which intervention should the nurse implement first?
a. Measure intake and output every 4 hours.
b. Apply oxygen by mask or nasal cannula.
c. Increase the IV flow rate to 250 mL/hr.
d. Place the client in a high-Fowlers position.

ANS: B
Dehydration most frequently leads to poor cerebral perfusion and cerebral hypoxia, causing confusion. Applying oxygen can reduce confusion, even if perfusion is still less than optimal. Increasing the IV flow rate would increase perfusion. However, depending on the degree of dehydration, rehydrating the client too rapidly with IV fluids can lead to cerebral edema. Measuring intake and output and placing the client in a high-Fowlers position will not address the clients problem.

DIF: Applying/Application REF: 168
KEY: Hydration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. After teaching a client who is being treated for dehydration, a nurse assesses the clients understanding. Which statement indicates the client correctly understood the teaching?
a. I must drink a quart of water or other liquid each day.
b. I will weigh myself each morning before I eat or drink.
c. I will use a salt substitute when making and eating my meals.
d. I will not drink liquids after 6 PM so I wont have to get up at night.

ANS: B
One liter of water weighs 1 kg; therefore, a change in body weight is a good measure of excess fluid loss or fluid retention. Weight loss greater than 0.5 lb daily is indicative of excessive fluid loss. The other statements are not indicative of practices that will prevent dehydration.

DIF: Analyzing/Analysis REF: 168
KEY: Hydration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse assesses a client who is prescribed a medication that inhibits angiotensin I from converting into angiotensin II (angiotensin-converting enzyme [ACE] inhibitor). For which expected therapeutic effect should the nurse assess?
a. Blood pressure decrease from 180/72 mm Hg to 144/50 mm Hg
b. Daily weight increase from 55 kg to 57 kg
c. Heart rate decrease from 100 beats/min to 82 beats/min
d. Respiratory rate increase from 12 breaths/min to 15 breaths/min

ANS: A
ACE inhibitors will disrupt the reninangiotensin II pathway and prevent the kidneys from reabsorbing water and sodium. The kidneys will excrete more water and sodium, decreasing the clients blood pressure.

DIF: Applying/Application REF: 178
KEY: Hydration| angiotensin-converting enzyme (ACE) inhibitor
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A nurse is assessing clients on a medical-surgical unit. Which adult client should the nurse identify as being at greatest risk for insensible water loss?
a. Client taking furosemide (Lasix)
b. Anxious client who has tachypnea
c. Client who is on fluid restrictions
d. Client who is constipated with abdominal pain

ANS: B
Insensible water loss is water loss through the skin, lungs, and stool. Clients at risk for insensible water loss include those being mechanically ventilated, those with rapid respirations, and those undergoing continuous GI suctioning. Clients who have thyroid crisis, trauma, burns, states of extreme stress, and fever are also at increased risk. The client taking furosemide will have increased fluid loss, but not insensible water loss. The other two clients on a fluid restriction and with constipation are not at risk for fluid loss.

DIF: Applying/Application REF: 165
KEY: Hydration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse is evaluating a client who is being treated for dehydration. Which assessment result should the nurse correlate with a therapeutic response to the treatment plan?
a. Increased respiratory rate from 12 breaths/min to 22 breaths/min
b. Decreased skin turgor on the clients posterior hand and forehead
c. Increased urine specific gravity from 1.012 to 1.030 g/mL
d. Decreased orthostatic light-headedness and dizziness

ANS: D
The focus of management for clients with dehydration is to increase fluid volumes to normal. When fluid volumes return to normal, clients should perfuse the brain more effectively, therefore improving confusion and decreasing orthostatic light-headedness or dizziness. Increased respiratory rate, decreased skin turgor, and increased specific gravity are all manifestations of dehydration.

DIF: Applying/Application REF: 168
KEY: Hydration
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. After teaching a client who is prescribed a restricted sodium diet, a nurse assesses the clients understanding. Which food choice for lunch indicates the client correctly understood the teaching?
a. Slices of smoked ham with potato salad
b. Bowl of tomato soup with a grilled cheese sandwich
c. Salami and cheese on whole wheat crackers

d. Grilled chicken breast with glazed carrots

ANS: D
Clients on restricted sodium diets generally should avoid processed, smoked, and pickled foods and those with sauces and other condiments. Foods lowest in sodium include fish, poultry, and fresh produce. The ham, tomato soup, salami, and crackers are often high in sodium.

DIF: Applying/Application REF: 169
KEY: Electrolyte imbalance MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A nurse is assessing clients for fluid and electrolyte imbalances. Which client should the nurse assess first for potential hyponatremia?
a. A 34-year-old on NPO status who is receiving intravenous D5W
b. A 50-year-old with an infection who is prescribed a sulfonamide antibiotic
c. A 67-year-old who is experiencing pain and is prescribed ibuprofen (Motrin)
d. A 73-year-old with tachycardia who is receiving digoxin (Lanoxin)

ANS: A
Dextrose 5% in water (D5W) contains no electrolytes. Because the client is not taking any food or fluids by mouth (NPO), normal sodium excretion can lead to hyponatremia. The sulfonamide antibiotic, ibuprofen, and digoxin will not put a client at risk for hyponatremia.

DIF: Applying/Application REF: 173
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A nurse teaches a client who is at risk for mild hypernatremia. Which statement should the nurse include in this clients teaching?
a. Weigh yourself every morning and every night.
b. Check your radial pulse twice a day.
c. Read food labels to determine sodium content.
d. Bake or grill the meat rather than frying it.

ANS: C
Most prepackaged foods have a high sodium content. Teaching clients how to read labels and calculate the sodium content of food can help them adhere to prescribed sodium restrictions and can prevent hypernatremia. Daily self-weighing and pulse checking are methods of identifying manifestations of hypernatremia, but they do not prevent it. The addition of substances during cooking, not the method of cooking, increases the sodium content of a meal.

DIF: Applying/Application REF: 172
KEY: Electrolyte imbalance MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

10. A nurse is caring for a client who has the following laboratory results: potassium 3.4 mEq/L, magnesium 1.8 mEq/L, calcium 8.5 mEq/L, sodium 144 mEq/L. Which assessment should the nurse complete first?
a. Depth of respirations
b. Bowel sounds
c. Grip strength
d. Electrocardiography

ANS: A
A client with a low serum potassium level may exhibit hypoactive bowel sounds, cardiac dysrhythmias, and muscle weakness resulting in shallow respirations and decreased handgrips. The nurse should assess the clients respiratory status first to ensure respirations are sufficient. The respiratory assessment should include rate and depth of respirations, respiratory effort, and oxygen saturation. The other assessments are important but are secondary to the clients respiratory status.

DIF: Analyzing/Analysis REF: 176
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. A nurse cares for a client who has a serum potassium of 7.5 mEq/L and is exhibiting cardiovascular changes. Which prescription should the nurse implement first?
a. Prepare to administer sodium polystyrene sulfate (Kayexalate) 15 g by mouth.
b. Provide a heart healthy, low-potassium diet.
c. Prepare to administer dextrose 20% and 10 units of regular insulin IV push.
d. Prepare the client for hemodialysis treatment.

ANS: C
A client with a high serum potassium level and cardiac changes should be treated immediately to reduce the extracellular potassium level. Potassium movement into the cells is enhanced by insulin by increasing the activity of sodium-potassium pumps. Insulin will decrease both serum potassium and glucose levels and therefore should be administered with dextrose to prevent hypoglycemia. Kayexalate may be ordered, but this therapy may take hours to reduce potassium levels. Dialysis may also be needed, but this treatment will take much longer to implement and is not the first prescription the nurse should implement. Decreasing potassium intake may help prevent hyperkalemia in the future but will not decrease the clients current potassium level.

DIF: Applying/Application REF: 178
KEY: Electrolyte imbalance| insulin
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12. A nurse is assessing clients on a medical-surgical unit. Which client is at risk for hypokalemia?
a. Client with pancreatitis who has continuous nasogastric suctioning
b. Client who is prescribed an angiotensin-converting enzyme (ACE) inhibitor
c. Client in a motor vehicle crash who is receiving 6 units of packed red blood cells
d. Client with uncontrolled diabetes and a serum pH level of 7.33

ANS: A
A client with continuous nasogastric suctioning would be at risk for actual potassium loss leading to hypokalemia. The other clients are at risk for potassium excess or hyperkalemia.

DIF: Understanding/Comprehension REF: 176
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A nurse is assessing a client with hypokalemia, and notes that the clients handgrip strength has diminished since the previous assessment 1 hour ago. Which action should the nurse take first?
a. Assess the clients respiratory rate, rhythm, and depth.
b. Measure the clients pulse and blood pressure.
c. Document findings and monitor the client.
d. Call the health care provider.

ANS: A
In a client with hypokalemia, progressive skeletal muscle weakness is associated with increasing severity of hypokalemia. The most life-threatening complication of hypokalemia is respiratory insufficiency. It is imperative for the nurse to perform a respiratory assessment first to make sure that the client is not in immediate jeopardy. Cardiac dysrhythmias are also associated with hypokalemia. The clients pulse and blood pressure should be assessed after assessing respiratory status. Next, the nurse would call the health care provider to obtain orders for potassium replacement. Documenting findings and continuing to monitor the client should occur during and after potassium replacement therapy.

DIF: Applying/Application REF: 175
KEY: Electrolyte imbalance

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. After teaching a client to increase dietary potassium intake, a nurse assesses the clients understanding. Which dietary meal selection indicates the client correctly understands the teaching?
a. Toasted English muffin with butter and blueberry jam, and tea with sugar
b. Two scrambled eggs, a slice of white toast, and a half cup of strawberries
c. Sausage, one slice of whole wheat toast, half cup of raisins, and a glass of milk
d. Bowl of oatmeal with brown sugar, a half cup of sliced peaches, and coffee

ANS: C
Meat, dairy products, and dried fruit have high concentrations of potassium. Eggs, breads, cereals, sugar, and some fruits (berries, peaches) are low in potassium. The menu selection of sausage, toast, raisins, and milk has the greatest number of items with higher potassium content.

DIF: Applying/Application REF: 175
KEY: Electrolyte imbalance MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

15. A client at risk for developing hyperkalemia states, I love fruit and usually eat it every day, but now I cant because of my high potassium level. How should the nurse respond?
a. Potatoes and avocados can be substituted for fruit.
b. If you cook the fruit, the amount of potassium will be lower.
c. Berries, cherries, apples, and peaches are low in potassium.
d. You are correct. Fruit is very high in potassium.

ANS: C
Not all fruit is potassium rich. Fruits that are relatively low in potassium and can be included in the diet include apples, apricots, berries, cherries, grapefruit, peaches, and pineapples. Fruits high in potassium include bananas, kiwi, cantaloupe, oranges, and dried fruit. Cooking fruit does not alter its potassium content.

DIF: Applying/Application REF: 175
KEY: Electrolyte imbalance
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

16. A nurse is caring for a client who has a serum calcium level of 14 mg/dL. Which provider order should the nurse implement first?
a. Encourage oral fluid intake.
b. Connect the client to a cardiac monitor.
c. Assess urinary output.
d. Administer oral calcitonin (Calcimar).

ANS: B
This client has hypercalcemia. Elevated serum calcium levels can decrease cardiac output and cause cardiac dysrhythmias. Connecting the client to a cardiac monitor is a priority to assess for lethal cardiac changes. Encouraging oral fluids, assessing urine output, and administering calcitonin are treatments for hypercalcemia, but are not the highest priority.

DIF: Applying/Application REF: 181
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

17. A nurse is caring for an older adult client who is admitted with moderate dehydration. Which intervention should the nurse implement to prevent injury while in the hospital?
a. Ask family members to speak quietly to keep the client calm.
b. Assess urine color, amount, and specific gravity each day.
c. Encourage the client to drink at least 1 liter of fluids each shift.

d. Dangle the client on the bedside before ambulating.

ANS: D
An older adult with moderate dehydration may experience orthostatic hypotension. The client should dangle on the bedside before ambulating. Although dehydration in an older adult may cause confusion, speaking quietly will not help the client remain calm or decrease confusion. Assessing the clients urine may assist with the diagnosis of dehydration but would not prevent injury. Clients are encouraged to drink fluids, but 1 liter of fluid each shift for an older adult may cause respiratory distress and symptoms of fluid overload, especially if the client has heart failure or renal insufficiency.

DIF: Applying/Application REF: 169
KEY: Electrolyte imbalance| safety| mobility/immobility
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. A nurse assesses a client who is admitted for treatment of fluid overload. Which manifestations should the nurse expect to find? (Select all that apply.)
a. Increased pulse rate
b. Distended neck veins
c. Decreased blood pressure
d. Warm and pink skin
e. Skeletal muscle weakness

ANS: A, B, E
Manifestations of fluid overload include increased pulse rate, distended neck veins, increased blood pressure, pale and cool skin, and skeletal muscle weakness.

DIF: Remembering/Knowledge REF: 171
KEY: Hydration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is assessing clients on a medical-surgical unit. Which clients are at increased risk for hypophosphatemia? (Select all that apply.)
a. A 36-year-old who is malnourished
b. A 42-year-old with uncontrolled diabetes
c. A 50-year-old with hyperparathyroidism
d. A 58-year-old with chronic renal failure
e. A 76-year-old who is prescribed antacids

ANS: A, B, E
Clients at risk for hypophosphatemia include those who are malnourished, those with uncontrolled diabetes mellitus, and those who use aluminum hydroxidebased or magnesium-based antacids. Hyperparathyroidism and chronic renal failure are common causes of hyperphosphatemia.

DIF: Remembering/Knowledge REF: 182
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse assesses a client who is prescribed a medication that inhibits aldosterone secretion and release. For which potential complications should the nurse assess? (Select all that apply.)
a. Urine output of 25 mL/hr
b. Serum potassium level of 5.4 mEq/L
c. Urine specific gravity of 1.02 g/mL
d. Serum sodium level of 128 mEq/L
e. Blood osmolality of 250 mOsm/L

ANS: B, E
Aldosterone is a naturally occurring hormone of the mineralocorticoid type that increases the reabsorption of water and sodium in the kidney at the same time that it promotes excretion of potassium. Any drug or condition that disrupts aldosterone secretion or release increases the clients risk for excessive water loss (increased urine output), increased potassium reabsorption, decreased blood osmolality, and increased urine specific gravity. The client would not be at risk for sodium imbalance.

DIF: Applying/Application REF: 173
KEY: Hydration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse is assessing a client who has an electrolyte imbalance related to renal failure. For which potential complications of this electrolyte imbalance should the nurse assess? (Select all that apply.)
a. Electrocardiogram changes
b. Slow, shallow respirations
c. Orthostatic hypotension
d. Paralytic ileus
e. Skeletal muscle weakness

ANS: A, D, E
Electrolyte imbalances associated with acute renal failure include hyperkalemia and hyperphosphatemia. The nurse should assess for electrocardiogram changes, paralytic ileus caused by decrease bowel mobility, and skeletal muscle weakness in clients with hyperkalemia. The other choices are potential complications of hypokalemia.

DIF: Applying/Application REF: 164
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse is caring for clients with electrolyte imbalances on a medical-surgical unit. Which clinical manifestations are correctly paired with the contributing electrolyte imbalance? (Select all that apply.)
a. Hypokalemia Flaccid paralysis with respiratory depression
b. Hyperphosphatemia Paresthesia with sensations of tingling and numbness
c. Hyponatremia Decreased level of consciousness
d. Hypercalcemia Positive Trousseaus and Chvosteks signs
e. Hypomagnesemia Bradycardia, peripheral vasodilation, and hypotension

ANS: A, C
Flaccid paralysis with respiratory depression is associated with hypokalemia. Decreased level of consciousness is associated with hyponatremia. Paresthesia with sensations of tingling and numbness is associated with hypophosphatemia or hypercalcemia. Positive Trousseaus and Chvosteks signs are associated with hypocalcemia or hyperphosphatemia. Bradycardia, peripheral vasodilation, and hypotension are associated with hypermagnesemia.

DIF: Analyzing/Analysis REF: 176
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. After administering 40 mEq of potassium chloride, a nurse evaluates the clients response. Which manifestations indicate that treatment is improving the clients hypokalemia? (Select all that apply.)
a. Respiratory rate of 8 breaths/min
b. Absent deep tendon reflexes
c. Strong productive cough
d. Active bowel sounds
e. U waves present on the electrocardiogram (ECG)

ANS: C, D
A strong, productive cough indicates an increase in muscle strength and improved potassium imbalance. Active bowel sounds also indicate treatment is working. A respiratory rate of 8 breaths/min, absent deep tendon reflexes, and U waves present on the ECG are all manifestations of hypokalemia and do not demonstrate that treatment is working.

DIF: Understanding/Comprehension REF: 177
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. A nurse develops a plan of care for a client who has a history of hypocalcemia. What interventions should the nurse include in this clients care plan? (Select all that apply.)
a. Encourage oral fluid intake of at least 2 L/day.
b. Use a draw sheet to reposition the client in bed.
c. Strain all urine output and assess for urinary stones.
d. Provide nonslip footwear for the client to use when out of bed.
e. Rotate the client from side to side every 2 hours.

ANS: B, D
Clients with long-standing hypocalcemia have brittle bones that may fracture easily. Safety needs are a priority. Nursing staff should use a draw sheet when repositioning the client in bed and have the client wear nonslip footwear when out of bed to prevent fractures and falls. The other interventions would not provide safety for this client.

DIF: Applying/Application REF: 181
KEY: Electrolyte imbalance
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 12: Assessment and Care of Patients with Acid-Base Imbalances

MULTIPLE CHOICE

1. A nurse assesses a client with diabetes mellitus who is admitted with an acid-base imbalance. The clients arterial blood gas values are pH 7.36, PaO2 98 mm Hg, PaCO2 33 mm Hg, and HCO3 18 mEq/L. Which manifestation should the nurse identify as an example of the clients compensation mechanism?
a. Increased rate and depth of respirations
b. Increased urinary output
c. Increased thirst and hunger
d. Increased release of acids from the kidneys

ANS: A
This client has metabolic acidosis. The respiratory system compensates by increasing its activity and blowing off excess carbon dioxide. Increased urinary output, thirst, and hunger are manifestations of hyperglycemia but are not compensatory mechanisms for acid-base imbalances. The kidneys do not release acids.

DIF: Applying/Application REF: 192
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse assesses a client who is experiencing an acid-base imbalance. The clients arterial blood gas values are pH 7.34, PaO2 88 mm Hg, PaCO2 38 mm Hg, and HCO3 19 mEq/L. Which assessment should the nurse perform first?
a. Cardiac rate and rhythm
b. Skin and mucous membranes
c. Musculoskeletal strength
d. Level of orientation

ANS: A
Early cardiovascular changes for a client experiencing moderate acidosis include increased heart rate and cardiac output. As the acidosis worsens, the heart rate decreases and electrocardiographic changes will be present. Central nervous system and neuromuscular system changes do not occur with mild acidosis and should be monitored if the acidosis worsens. Skin and mucous membrane assessment is not a priority now, but will change as acidosis worsens.

DIF: Applying/Application REF: 192
KEY: Acid-base imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nurse assesses a client who is prescribed furosemide (Lasix) for hypertension. For which acid-base imbalance should the nurse assess to prevent complications of this therapy?
a. Respiratory acidosis
b. Respiratory alkalosis
c. Metabolic acidosis
d. Metabolic alkalosis

ANS: D
Many diuretics, especially loop diuretics, increase the excretion of hydrogen ions, leading to excess acid loss through the renal system. This situation is an acid deficit of metabolic origin.

DIF: Applying/Application REF: 195
KEY: Acid-base imbalance| diuretics
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse is caring for a client who is experiencing moderate metabolic alkalosis. Which action should the

nurse take?
a. Monitor daily hemoglobin and hematocrit values.
b. Administer furosemide (Lasix) intravenously.
c. Encourage the client to take deep breaths.
d. Teach the client fall prevention measures.

ANS: D
The priority nursing care for a client who is experiencing moderate metabolic alkalosis is providing client safety. Clients with metabolic alkalosis have muscle weakness and are at risk for falling. The other nursing interventions are not appropriate for metabolic alkalosis.

DIF: Remembering/Knowledge REF: 196
KEY: Acid-base imbalance| falls| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A nurse is assessing a client who has acute pancreatitis and is at risk for an acid-base imbalance. For which manifestation of this acid-base imbalance should the nurse assess?
a. Agitation
b. Kussmaul respirations
c. Seizures
d. Positive Chvosteks sign

ANS: B
The pancreas is a major site of bicarbonate production. Pancreatitis can cause a relative metabolic acidosis through underproduction of bicarbonate ions. Manifestations of acidosis include lethargy and Kussmaul respirations. Agitation, seizures, and a positive Chvosteks sign are manifestations of the electrolyte imbalances that accompany alkalosis.

DIF: Applying/Application REF: 192
KEY: Acid-base imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse assesses a client who is admitted with an acid-base imbalance. The clients arterial blood gas values are pH 7.32, PaO2 85 mm Hg, PaCO2 34 mm Hg, and HCO3 16 mEq/L. What action should the nurse take next?
a. Assess clients rate, rhythm, and depth of respiration.
b. Measure the clients pulse and blood pressure.
c. Document the findings and continue to monitor.
d. Notify the physician as soon as possible.

ANS: A
Progressive skeletal muscle weakness is associated with increasing severity of acidosis. Muscle weakness can lead to severe respiratory insufficiency. Acidosis does lead to dysrhythmias (due to hyperkalemia), but these would best be assessed with cardiac monitoring. Findings should be documented, but simply continuing to monitor is not sufficient. Before notifying the physician, the nurse must have more data to report.

DIF: Applying/Application REF: 192
KEY: Acid-base imbalance
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A nurse is caring for a client who has the following arterial blood values: pH 7.12, PaO2 56 mm Hg, PaCO2 65 mm Hg, and HCO3 22 mEq/L. Which clinical situation should the nurse correlate with these values?
a. Diabetic ketoacidosis in a person with emphysema
b. Bronchial obstruction related to aspiration of a hot dog
c. Anxiety-induced hyperventilation in an adolescent
d. Diarrhea for 36 hours in an older, frail woman

ANS: B
Arterial blood gas values indicate that the client has acidosis with normal levels of bicarbonate, suggesting that the problem is not metabolic. Arterial concentrations of oxygen and carbon dioxide are abnormal, with low oxygen and high carbon dioxide levels. Thus, this client has respiratory acidosis from inadequate gas exchange The fact that the bicarbonate level is normal indicates that this is an acute respiratory problem rather than a chronic problem, because no renal compensation has occurred.

DIF: Analyzing/Analysis REF: 193
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse is caring for a client who has just experienced a 90-second tonic-clonic seizure. The clients arterial blood gas values are pH 6.88, PaO2 50 mm Hg, PaCO2 60 mm Hg, and HCO3 22 mEq/L. Which action should the nurse take first?
a. Apply oxygen by mask or nasal cannula.
b. Apply a paper bag over the clients nose and mouth.
c. Administer 50 mL of sodium bicarbonate intravenously.
d. Administer 50 mL of 20% glucose and 20 units of regular insulin.

ANS: A
The client has experienced a combination of metabolic and acute respiratory acidosis through heavy skeletal muscle contractions and no gas exchange. When the seizures have stopped and the client can breathe again, the fastest way to return acid-base balance is to administer oxygen. Applying a paper bag over the clients nose and mouth would worsen the acidosis. Sodium bicarbonate should not be administered because the clients arterial bicarbonate level is normal. Glucose and insulin are administered together to decrease serum potassium levels. This action is not appropriate based on the information provided.

DIF: Applying/Application REF: 189
KEY: Acid-base imbalance| laboratory values| medical emergency
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. After teaching a client who was malnourished and is being discharged, a nurse assesses the clients understanding. Which statement indicates the client correctly understood teaching to decrease risk for the development of metabolic acidosis?
a. I will drink at least three glasses of milk each day.
b. I will eat three well-balanced meals and a snack daily.
c. I will not take pain medication and antihistamines together.
d. I will avoid salting my food when cooking or during meals.

ANS: B
Starvation or a diet with too few carbohydrates can lead to metabolic acidosis by forcing cells to switch to using fats for fuel and by creating ketoacids as a by-product of excessive fat metabolism. Eating sufficient calories from all food groups helps reduce this risk.

DIF: Applying/Application REF: 191
KEY: Acid-base imbalance| nutrition MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

10. A nurse evaluates the following arterial blood gas values in a client: pH 7.48, PaO2 98 mm Hg, PaCO2 28 mm Hg, and HCO3 22 mEq/L. Which client condition should the nurse correlate with these results?
a. Diarrhea and vomiting for 36 hours
b. Anxiety-induced hyperventilation
c. Chronic obstructive pulmonary disease (COPD)
d. Diabetic ketoacidosis and emphysema

ANS: B

The elevated pH level indicates alkalosis. The bicarbonate level is normal, and so is the oxygen partial pressure. Loss of carbon dioxide is the cause of the alkalosis, which would occur in response to hyperventilation. Diarrhea and vomiting would cause metabolic alterations, COPD would lead to respiratory acidosis, and the client with emphysema most likely would have combined metabolic acidosis on top of a mild, chronic respiratory acidosis.

DIF: Applying/Application REF: 194
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. After providing discharge teaching, a nurse assesses the clients understanding regarding increased risk for metabolic alkalosis. Which statement indicates the client needs additional teaching?
a. I dont drink milk because it gives me gas and diarrhea.
b. I have been taking digoxin every day for the last 15 years.
c. I take sodium bicarbonate after every meal to prevent heartburn.
d. In hot weather, I sweat so much that I drink six glasses of water each day.

ANS: C
Excessive oral ingestion of sodium bicarbonate and other bicarbonate-based antacids can cause metabolic alkalosis. Avoiding milk, taking digoxin, and sweating would not lead to increased risk of metabolic alkalosis.

DIF: Analyzing/Analysis REF: 195
KEY: Acid-base imbalance| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

12. A nurse is caring for a client who is experiencing excessive diarrhea. The clients arterial blood gas values are pH 7.28, PaO2 98 mm Hg, PaCO2 45 mm Hg, and HCO3 16 mEq/L. Which provider order should the nurse expect to receive?
a. Furosemide (Lasix) 40 mg intravenous push
b. Sodium bicarbonate 100 mEq diluted in 1 L of D5W
c. Mechanical ventilation
d. Indwelling urinary catheter

ANS: B
This clients arterial blood gas values represent metabolic acidosis related to a loss of bicarbonate ions from diarrhea. The bicarbonate should be replaced to help restore this clients acid-base balance. Furosemide would cause an increase in acid fluid and acid elimination via the urinary tract; although this may improve the clients pH, the client has excessive diarrhea and cannot afford to lose more fluid. Mechanical ventilation is used to treat respiratory acidosis for clients who cannot keep their oxygen saturation at 90%, or who have respirator muscle fatigue. Mechanical ventilation and an indwelling urinary catheter would not be prescribed for this client.

DIF: Applying/Application REF: 191
KEY: Acid-base imbalance| laboratory values| elimination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse evaluates a clients arterial blood gas values (ABGs): pH 7.30, PaO2 86 mm Hg, PaCO2 55 mm Hg, and HCO3 22 mEq/L. Which intervention should the nurse implement first?
a. Assess the airway.
b. Administer prescribed bronchodilators.
c. Provide oxygen.
d. Administer prescribed mucolytics.

ANS: A
All interventions are important for clients with respiratory acidosis; this is indicated by the ABGs. However, the priority is assessing and maintaining an airway. Without a patent airway, other interventions will not be

helpful.

DIF: Applying/Application REF: 191
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A nurse is planning care for a client who is hyperventilating. The clients arterial blood gas values are pH 7.30, PaO2 94 mm Hg, PaCO2 31 mm Hg, and HCO3 26 mEq/L. Which question should the nurse ask when developing this clients plan of care?
a. Do you take any over-the-counter medications?
b. You appear anxious. What is causing your distress?
c. Do you have a history of anxiety attacks?
d. You are breathing fast. Is this causing you to feel light-headed?

ANS: B
The nurse should assist the client who is experiencing anxiety-induced respiratory alkalosis to identify causes of the anxiety. The other questions will not identify the cause of the acid-base imbalance.

DIF: Applying/Application REF: 195
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

15. A nurse is caring for a client who has chronic emphysema and is receiving oxygen therapy at 6 L/min via nasal cannula. The following clinical data are available:
Arterial Blood Gases Vital Signs
pH = 7.28 Pulse rate = 96 beats/min
PaO2 = 85 mm Hg Blood pressure = 135/45
PaCO2 = 55 mm Hg Respiratory rate = 6 breaths/min
HCO3 = 26 mEq/L O2 saturation = 88%
Which action should the nurse take first?
a. Notify the Rapid Response Team and provide ventilation support.
b. Change the nasal cannula to a mask and reassess in 10 minutes.
c. Place the client in Fowlers position if he or she is able to tolerate it.
d. Decrease the flow rate of oxygen to 2 to 4 L/min, and reassess.

ANS: A
The primary trigger for respiration in a client with chronic respiratory acidosis is a decreased arterial oxygen level (hypoxic drive). Oxygen therapy can inhibit respiratory efforts in this case, eventually causing respiratory arrest and death. The nurse could decrease the oxygen flow rate; eventually, this might improve the clients respiratory rate, but the priority action would be to call the Rapid Response Team whenever a client with chronic carbon dioxide retention has a respiratory rate less than 10 breaths/min. Changing the cannula to a mask does nothing to improve the clients hypoxic drive, nor would it address the clients most pressing need. Positioning will not help the client breathe at a normal rate or maintain client safety.

DIF: Applying/Application REF: 194
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse is planning interventions that regulate acid-base balance to ensure the pH of a clients blood remains within the normal range. Which abnormal physiologic functions may occur if the client experiences an acid-base imbalance? (Select all that apply.)
a. Reduction in the function of hormones
b. Fluid and electrolyte imbalances
c. Increase in the function of selected enzymes

d. Excitable cardiac muscle membranes
e. Increase in the effectiveness of many drugs

ANS: A, B, E
Acid-base imbalances interfere with normal physiology, including reducing the function of hormones and enzymes, causing fluid and electrolyte imbalances, making heart membranes more excitable, and decreasing the effectiveness of many drugs.

DIF: Remembering/Knowledge REF: 185
KEY: Acid-base imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse assesses a client who is experiencing an acid-base imbalance. The clients arterial blood gas values are pH 7.32, PaO2 94 mm Hg, PaCO2 34 mm Hg, and HCO3 18 mEq/L. For which clinical manifestations should the nurse assess? (Select all that apply.)
a. Reduced deep tendon reflexes
b. Drowsiness
c. Increased respiratory rate
d. Decreased urinary output
e. Positive Trousseaus sign

ANS: A, B, C
Metabolic acidosis causes neuromuscular changes, including reduced muscle tone and deep tendon reflexes. Clients usually present with lethargy and drowsiness. The respiratory system will attempt to compensate for the metabolic acidosis; therefore, respirations will increase rate and depth. A positive Trousseaus sign is associated with alkalosis. Decreased urine output is not a manifestation of metabolic acidosis.

DIF: Understanding/Comprehension REF: 192
KEY: Acid-base imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is assessing clients who are at risk for acid-base imbalance. Which clients are correctly paired with the acid-base imbalance? (Select all that apply.)
a. Metabolic alkalosis Young adult who is prescribed intravenous morphine sulfate for pain
b. Metabolic acidosis Older adult who is following a carbohydrate-free diet
c. Respiratory alkalosis Client on mechanical ventilation at a rate of 28 breaths/min
d. Respiratory acidosis Postoperative client who received 6 units of packed red blood cells
e. Metabolic alkalosis Older client prescribed antacids for gastroesophageal reflux disease

ANS: B, C, E
Respiratory acidosis often occurs as the result of underventilation. The client who is taking opioids, especially IV opioids, is at risk for respiratory depression and respiratory acidosis. One cause of metabolic acidosis is a strict low-calorie diet or one that is low in carbohydrate content. Such a diet increases the rate of fat catabolism and results in the formation of excessive ketoacids. A ventilator set at a high respiratory rate or tidal volume will cause the client to lose too much carbon dioxide, leading to an acid deficit and respiratory alkalosis. Citrate is a substance used as a preservative in blood products. It is not only a base, it is also a precursor for bicarbonate. Multiple units of packed red blood cells could cause metabolic alkalosis. Sodium bicarbonate antacids may increase the risk of metabolic alkalosis.

DIF: Analyzing/Analysis REF: 192
KEY: Acid-base imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A nurse assesses a client who is receiving total parenteral nutrition. For which adverse effects related to an acid-base imbalance should the nurse assess? (Select all that apply.)
a. Positive Chvosteks sign

b. Elevated blood pressure
c. Bradycardia
d. Increased muscle strength
e. Anxiety and irritability

ANS: A, E
A client receiving total parenteral nutrition is at risk for metabolic alkalosis. Manifestations of metabolic alkalosis include positive Chvosteks sign, normal or low blood pressure, increased heart rate, skeletal muscle weakness, and anxiety and irritability.

DIF: Applying/Application REF: 194
KEY: Acid-base imbalance| nutrition
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A nurse is planning care for a client who is anxious and irritable. The clients arterial blood gas values are pH 7.30, PaO2 96 mm Hg, PaCO2 43 mm Hg, and HCO3 19 mEq/L. Which questions should the nurse ask the client and spouse when developing the plan of care? (Select all that apply.)
a. Are you taking any antacid medications?
b. Is your spouses current behavior typical?
c. Do you drink any alcoholic beverages?
d. Have you been experiencing any vomiting?
e. Are you experiencing any shortness of breath?

ANS: B, C
This clients symptoms of anxiety and irritability are related to a state of metabolic acidosis. The nurse should ask the clients spouse or family members if the clients behavior is typical for him or her, and establish a baseline for comparison with later assessment findings. The nurse should also assess for alcohol intake because alcohol can change a clients personality and cause metabolic acidosis. The other options are not causes of metabolic acidosis.

DIF: Applying/Application REF: 193
KEY: Acid-base imbalance| laboratory values
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

Chapter 13: Infusion Therapy

MULTIPLE CHOICE

1.A nurse is caring for a client who has just had a central venous access line inserted. Which action should the nurse take next?

a. Begin the prescribed infusion via the new access.
b. Ensure an x-ray is completed to confirm placement.
c. Check medication calculations with a second RN.
d. Make sure the solution is appropriate for a central line.

ANS: B

A central venous access device, once placed, needs an x-ray confirmation of proper placement before it is used. The bedside nurse would be responsible for beginning the infusion once placement has been verified. Any IV solution can be given through a central line.

DIF:Applying/Application REF: 205

KEY:Vascular access device

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2.A nurse assesses a client who has a radial artery catheter. Which assessment should the nurse complete first?

a. Amount of pressure in fluid container
b. Date of catheter tubing change
c. Percent of heparin in infusion container
d. Presence of an ulnar pulse

ANS: D

An intra-arterial catheter may cause arterial occlusion, which can lead to absent or decreased perfusion to the extremity. Assessment of an ulnar pulse is one way to assess circulation to the arm in which the catheter is located. The nurse would note that there is enough pressure in the fluid container to keep the system flushed, and would check to see whether the catheter tubing needs to be changed. However, these are not assessments of greatest concern. Because of heparin-induced thrombocytopenia, heparin is not used in most institutions for an arterial catheter.

DIF:Applying/Application REF: 224

KEY:Vascular access device

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3.A nurse teaches a client who is being discharged home with a peripherally inserted central catheter (PICC). Which statement should the nurse include in this clients teaching?

a. Avoid carrying your grandchild with the arm that has the central catheter.
b. Be sure to place the arm with the central catheter in a sling during the day.

c. Flush the peripherally inserted central catheter line with normal saline daily.
d. You can use the arm with the central catheter for most activities of daily living.

ANS: A

A properly placed PICC (in the antecubital fossa or the basilic vein) allows the client considerable freedom of movement. Clients can participate in most activities of daily living; however, heavy lifting can dislodge the catheter or occlude the lumen. Although it is important to keep the insertion site and tubing dry, the client can shower. The device is flushed with heparin.

DIF:Applying/Application REF: 206

KEY: Vascular access device MSC: Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

4.A nurse is caring for a client who is having a subclavian central venous catheter inserted. The client begins to report chest pain and difficulty breathing. After administering oxygen, which action should the nurse take next?

a. Administer a sublingual nitroglycerin tablet.
b. Prepare to assist with chest tube insertion.
c. Place a sterile dressing over the IV site.
d. Re-position the client into the Trendelenburg position.

ANS: B

An insertion-related complication of central venous catheters is a pneumothorax. Signs and symptoms of a pneumothorax include chest pain and dyspnea. Treatment includes removing the catheter, administering oxygen, and placing a chest tube. Pain is caused by the pneumothorax, which must be taken care of with a chest tube insertion. Use of a sterile dressing and placement of the client in a Trendelenburg position are not indicated for the primary problem of a pneumothorax.

DIF:Applying/Application REF: 206

KEY:Vascular access device| medical emergencies

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5.A nurse is caring for a client who is receiving an epidural infusion for pain management. Which assessment finding requires immediate intervention from the nurse?

a. Redness at the catheter insertion site
b. Report of headache and stiff neck
c. Temperature of 100.1 F (37.8 C)
d. Pain rating of 8 on a scale of 0 to 10

ANS: B

Complications of epidural therapy include infection, bleeding, leakage of cerebrospinal fluid, occlusion of the catheter lumen, and catheter migration. Headache, neck stiffness, and a temperature higher than 101 F are signs

of meningitis and should be reported to the provider immediately. The other findings are important but do not require immediate intervention.

DIF:Applying/Application REF: 224

KEY:Vascular access device| medication safety| epidural

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6.A nurse assesses a client who had an intraosseous catheter placed in the left leg. Which assessment finding is of greatest concern?

a. The catheter has been in place for 20 hours.
b. The client has poor vascular access in the upper extremities.
c. The catheter is placed in the proximal tibia.
d. The clients left lower extremity is cool to the touch.

ANS: D

Compartment syndrome is a condition in which increased tissue perfusion in a confined anatomic space causes decreased blood flow to the area. A cool extremity can signal the possibility of this syndrome. All other findings are important; however, the possible development of compartment syndrome requires immediate intervention because the client could require amputation of the limb if the nurse does not correctly assess this perfusion problem.

DIF:Applying/Application REF: 223

KEY:Vascular access device

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7.A nurse is assessing clients who have intravenous therapy prescribed. Which assessment finding for a client with a peripherally inserted central catheter (PICC) requires immediate attention?

a. The initial site dressing is 3 days old.
b. The PICC was inserted 4 weeks ago.
c. A securement device is absent.
d. Upper extremity swelling is noted.

ANS: D

Upper extremity swelling could indicate infiltration, and the PICC will need to be removed. The initial dressing over the PICC site should be changed within 24 hours. This does not require immediate attention, but the swelling does. The dwell time for PICCs can be months or even years. Securement devices are being used more often now to secure the catheter in place and prevent complications such as phlebitis and infiltration. The IV should have one, but this does not take priority over the client whose arm is swollen.

DIF:Applying/Application REF: 205

KEY:Vascular access device| medication safety

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8.A nurse assesses a clients peripheral IV site, and notices edema and tenderness above the site. Which action should the nurse take next?

a. Apply cold compresses to the IV site.
b. Elevate the extremity on a pillow.
c. Flush the catheter with normal saline.
d. Stop the infusion of intravenous fluids.

ANS: D

Infiltration occurs when the needle dislodges partially or completely from the vein. Signs of infiltration include edema and tenderness above the site. The nurse should stop the infusion and remove the catheter. Cold compresses and elevation of the extremity can be done after the catheter is discontinued to increase client comfort. Alternatively, warm compresses may be prescribed per institutional policy and may help speed circulation to the area.

DIF:Applying/Application REF: 218

KEY:Vascular access device| medication safety

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9.While assessing a clients peripheral IV site, the nurse observes a streak of red along the vein path and palpates a 4-cm venous cord. How should the nurse document this finding?

a. Grade 3 phlebitis at IV site
b. Infection at IV site
c. Thrombosed area at IV site
d. Infiltration at IV site

ANS: A

The presence of a red streak and palpable cord indicates grade 3 phlebitis. No information in the description indicates that infection, thrombosis, or infiltration is present.

DIF:Understanding/Comprehension REF: 221

KEY:Vascular access device

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10.A nurse responds to an IV pump alarm related to increased pressure. Which action should the nurse take first?

a. Check for kinking of the catheter.
b. Flush the catheter with a thrombolytic enzyme.
c. Get a new infusion pump.
d. Remove the IV catheter.

ANS: A

Fluid flow through the infusion system requires that pressure on the external side be greater than pressure at the catheter tip. Fluid flow can be slowed for many reasons. A common reason, and one that is easy to correct, is a kinked catheter. If this is not the cause of the pressure alarm, the nurse may have to ascertain whether a clot has formed inside the catheter lumen, or if the pump is no longer functional. Removal of the IV catheter and placement of a new IV catheter should be completed when no other option has resolved the problem.

DIF:Applying/Application REF: 214

KEY:Medication safety| vascular access device

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11.A nurse prepares to insert a peripheral venous catheter in an older adult client. Which action should the nurse take to protect the clients skin during this procedure?

a. Lower the extremity below the level of the heart.
b. Apply warm compresses to the extremity.
c. Tap the skin lightly and avoid slapping.
d. Place a washcloth between the skin and tourniquet.

ANS: D

To protect the clients skin, the nurse should place a washcloth or the clients gown between the skin and tourniquet. The other interventions are methods to distend the vein but will not protect the clients skin.

DIF:Understanding/Comprehension REF: 221

KEY:Vascular access device| older adult

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12.A nurse delegates care to an unlicensed assistive personnel (UAP). Which statement should the nurse include when delegating hygiene for a client who has a vascular access device?

a. Provide a bed bath instead of letting the client take a shower.
b. Use sterile technique when changing the dressing.
c. Disconnect the intravenous fluid tubing prior to the clients bath.
d. Use a plastic bag to cover the extremity with the device.

ANS: D

The nurse should ask the UAP to cover the extremity with the vascular access device with a plastic bag or wrap to keep the dressing and site dry. The client may take a shower with a vascular device. The nurse should disconnect IV fluid tubing prior to the bath and change the dressing using sterile technique if necessary. These options are not appropriate to delegate to the UAP.

DIF:Applying/Application REF: 213

KEY:Vascular access device| delegation| unlicensed assistive personnel

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

13.A nurse teaches a client who is prescribed a central vascular access device. Which statement should the nurse include in this clients teaching?

a. You will need to wear a sling on your arm while the device is in place.
b. There is no risk of infection because sterile technique will be used during insertion.
c. Ask all providers to vigorously clean the connections prior to accessing the device.
d. You will not be able to take a bath with this vascular access device.

ANS: C

Clients should be actively engaged in the prevention of catheter-related bloodstream infections and taught to remind all providers to perform hand hygiene and vigorously clean connections prior to accessing the device. The other statements are incorrect.

DIF:Applying/Application REF: 216

KEY: Vascular access device| Speak Up campaign| patient safety| infection control

MSC:Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

14.A nurse is caring for a client with a peripheral vascular access device who is experiencing pain, redness, and swelling at the site. After removing the device, which action should the nurse take to relieve pain?

a. Administer topical lidocaine to the site.
b. Place warm compresses on the site.
c. Administer prescribed oral pain medication.
d. Massage the site with scented oils.

ANS: B

At the first sign of phlebitis, the catheter should be removed and warm compresses used to relieve pain. The other options are not appropriate for this type of pain.

DIF:Applying/Application REF: 217

KEY:Vascular access device| nonpharmacologic pain management

MSC:Integrated Process: Caring

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

15.A nurse assesses a client who was started on intraperitoneal therapy 5 days ago. The client reports abdominal pain and feeling warm. For which complication of this therapy should the nurse assess this client?

a. Allergic reaction
b. Bowel obstruction
c. Catheter lumen occlusion

d. Infection

ANS: D

Fever, abdominal pain, abdominal rigidity, and rebound tenderness may be present in the client who has peritonitis related to intraperitoneal therapy. Peritonitis is preventable by using strict aseptic technique in handling all equipment and infusion supplies. An allergic reaction would occur earlier in the course of treatment. Bowel obstruction and catheter lumen occlusion can occur but would present clinically in different ways.

DIF:Applying/Application REF: 218

KEY:Vascular access device| infection

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

16.A medical-surgical nurse is concerned about the incidence of complications related to IV therapy, including bloodstream infection. Which intervention should the nurse suggest to the management team to make the biggest impact on decreasing complications?

a. Initiate a dedicated team to insert access devices.
b. Require additional education for all nurses.
c. Limit the use of peripheral venous access devices.
d. Perform quality control testing on skin preparation products.

ANS: A

The Centers for Disease Control and Prevention recommends having a dedicated IV team to reduce complications, save money, and improve client satisfaction and outcomes. In-service education would always be helpful, but it would not have the same outcomes as an IV team. Limiting IV starts to the most experienced nurses does not allow newer nurses to gain this expertise. The quality of skin preparation products is only one aspect of IV insertion that could contribute to infection.

DIF:Applying/Application REF: 199

KEY: Vascular access device| infection| quality improvement| core measure

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17.A nurse prepares to flush a peripherally inserted central catheter (PICC) line with 50 units of heparin. The pharmacy supplies a multi-dose vial of heparin with a concentration of 100 units/mL. Which of the syringes shown below should the nurse use to draw up and administer the heparin?

a.
b.
c.
d.

ANS: D

Always use a 10-mL syringe when flushing PICC lines because a smaller syringe creates higher pressure, which could rupture the lumen of the PICC.

DIF:Applying/Application REF: 206

KEY:Medication safety| vascular access device

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

18.A home care nurse prepares to administer intravenous medication to a client. The nurse assesses the site and reviews the clients chart prior to administering the medication:

Client: Thomas Jackson

DOB: 5/3/1936

Gender: Male

January 23 (Today): *Right upper extremity PICC is intact, patent, and has a good blood return. Site clean and free from manifestations of infiltration, irritation, and infection. Sue Franks, RN*

January 20: *Purulent drainage from sacral wound. Wound cleansed and dressing changed. Dr. Smith notified and updated on client status. New orders received for intravenous antibiotics. Sue Franks, RN*

January 13: *Client alert and oriented. Sacral wound dressing changed. Sue Franks, RN*

January 6: *Right upper extremity PICC inserted. No complications. Discharged with home health care. Dr. Smith*

Based on the information provided, which action should the nurse take?

a. Notify the health care provider.
b. Administer the prescribed medication.
c. Discontinue the PICC.
d. Switch the medication to the oral route.

ANS: B

A PICC that is functioning well without inflammation or infection may remain in place for months or even years. Because the line shows no signs of complications, it is permissible to administer the IV antibiotic. There is no need to call the physician to have the IV route changed to an oral route.

DIF:Applying/Application REF: 206

KEY:Medication safety| vascular access device

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1.A registered nurse (RN) delegates client care to an experienced licensed practical nurse (LPN). Which standards should guide the RN when delegating aspects of IV therapy to the LPN? **(Select all that apply.)**

a. State Nurse Practice Act
b. The facilitys Policies and Procedures manual
c. The LPNs level of education and experience

d. The Joint Commissions goals and criterion
e. Client needs and prescribed orders

ANS: A, B

The state Nurse Practice Act will have the information the RN needs, and in some states, LPNs are able to perform specific aspects of IV therapy. However, in a client care situation, it may be difficult and time-consuming to find it and read what LPNs are permitted to do, so another good solution would be for the nurse to check facility policy and follow it.

DIF:Applying/Application REF: 200

KEYelegation| competencies

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2.A nurse assesses a client who has a peripherally inserted central catheter (PICC). For which complications should the nurse assess? **(Select all that apply.)**

a. Phlebitis
b. Pneumothorax
c. Thrombophlebitis
d. Excessive bleeding
e. Extravasation

ANS: A, C

Although the complication rate with PICCs is fairly low, the most common complications are phlebitis, thrombophlebitis, and catheter-related bloodstream infection. Pneumothorax, excessive bleeding, and extravasation are not common complications.

DIF:Applying/Application REF: 206

KEY:Vascular access device

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3.A nurse prepares to administer a blood transfusion to a client, and checks the blood label with a second registered nurse using the International Society of Blood Transfusion (ISBT) universal bar-coding system to ensure the right blood for the right client. Which components must be present on the blood label in bar code and in eye-readable format? **(Select all that apply.)**

a. Unique facility identifier
b. Lot number related to the donor
c. Name of the client receiving blood
d. ABO group and Rh type of the donor
e. Blood type of the client receiving blood

ANS: A, B, D

The ISBT universal bar-coding system includes four components: (1) the unique facility identifier, (2) the lot

number relating to the donor, (3) the product code, and (4) the ABO group and Rh type of the donor.

DIF:Remembering/Knowledge REF: 200

KEY:Blood transfusion| safety

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4.A nurse assists with the insertion of a central vascular access device. Which actions should the nurse ensure are completed to prevent a catheter-related bloodstream infection? **(Select all that apply.)**

a. Include a review for the need of the device each day in the clients plan of care.
b. Remind the provider to perform hand hygiene prior to starting the procedure.
c. Cleanse the preferred site with alcohol and let it dry completely before insertion.
d. Ask everyone in the room to wear a surgical mask during the procedure.
e. Plan to complete a sterile dressing change on the device every day.

ANS: A, B, D

The central vascular access device bundle to prevent catheter-related bloodstream infections includes using a checklist during insertion, performing hand hygiene before inserting the catheter and anytime someone touches the catheter, using chlorhexidine to disinfect the skin at the site of insertion, using preferred sites, and reviewing the need for the catheter every day. The practitioner who inserts the device should wear sterile gloves, gown and mask, and anyone in the room should wear a mask. A sterile dressing change should be completed per organizational policy, usually every 7 days and as needed.

DIF:Remembering/Knowledge REF: 216

KEY:Vascular access device| infection control| infection

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

SHORT ANSWER

1.A client is prescribed 1000 mL of normal saline to infuse over 24 hours. At what rate should the nurse set the pump (mL/hr) to deliver this infusion? (*Record your answer using a whole number.*) ____ mL/hr

ANS:

42

1000 mL 24 hours = 41.6 mL/hr.

DIF: Applying/Application REF: 205

KEY: Medication safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2.A client is prescribed 250 mL of normal saline to infuse over 4 hours via gravity. The facility supplies gravity tubing with a drip factor of 15 drops/mL. At what rate (drops/min) should the nurse set the infusion to

deliver? (*Record your answer using a whole number.*)

_____ drops/min

ANS:

16 drops/min

DIF: Applying/Application REF: 205

KEY: Medication safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 14: Care of Preoperative Patients

MULTIPLE CHOICE

1. An older client is hospitalized after an operation. When assessing the client for postoperative infection, the nurse places priority on which assessment?
a. Change in behavior
b. Daily white blood cell count
c. Presence of fever and chills
d. Tolerance of increasing activity

ANS: A
Older people have an age-related decrease in immune system functioning and may not show classic signs of infection such as increased white blood cell count, fever and chills, or obvious localized signs of infection. A change in behavior often signals an infection or onset of other illness in the older client.

DIF: Applying/Application REF: 234
KEY: Preoperative nursing| infection| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

2. A preoperative nurse is assessing a client prior to surgery. Which information would be most important for the nurse to relay to the surgical team?
a. Allergy to bee and wasp stings
b. History of lactose intolerance
c. No previous experience with surgery
d. Use of multiple herbs and supplements

ANS: D
Some herbs and supplements can interact with medications, so this information needs to be reported as the priority. An allergy to bee and wasp stings should not affect the client during surgery. Lactose intolerance should also not affect the client during surgery but will need to be noted before a postoperative diet is ordered. Lack of experience with surgery may increase anxiety and may require higher teaching needs, but is not the priority over client safety.

DIF: Applying/Application REF: 241
KEY: Preoperative nursing| herbs and supplements| medication interactions
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A nurse works on the postoperative floor and has four clients who are being discharged tomorrow. Which one has the greatest need for the nurse to consult other members of the health care team for post-discharge care?
a. Married young adult who is the primary caregiver for children
b. Middle-aged client who is post knee replacement, needs physical therapy
c. Older adult who lives at home despite some memory loss
d. Young client who lives alone, has family and friends nearby

ANS: C
The older adult has the most potentially complex discharge needs. With memory loss, the client may not be able to follow the prescribed home regimen. The clients physical abilities may be limited by chronic illness. This client has several safety needs that should be assessed. The other clients all have evidence of a support system and no known potential for serious safety issues.

DIF: Applying/Application REF: 234
KEY: Preoperative nursing| discharge planning| older adult
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A clinic nurse is teaching a client prior to surgery. The client does not seem to comprehend the teaching, forgets a lot of what is said, and asks the same questions again and again. What action by the nurse is best?
a. Assess the client for anxiety.
b. Break the information into smaller bits.
c. Give the client written information.
d. Review the information again.

ANS: A
Anxiety can interfere with learning and cooperation. The nurse should assess the client for anxiety. The other actions are appropriate too, and can be included in the teaching plan, but effective teaching cannot occur if the client is highly anxious.

DIF: Applying/Application REF: 246
KEY: Preoperative nursing| anxiety| client education
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

5. A preoperative nurse is reviewing morning laboratory values on four clients waiting for surgery. Which result warrants immediate communication with the surgical team?
a. Creatinine: 1.2 mg/dL
b. Hemoglobin: 14.8 mg/dL
c. Potassium: 2.9 mEq/L
d. Sodium: 134 mEq/L

ANS: C
A potassium of 2.9 mEq/L is critically low and can affect cardiac and respiratory status. The nurse should communicate this laboratory value immediately. The creatinine is at the high end of normal, the hemoglobin is normal, and the sodium is only slightly low (normal low being 136 mEq/L), so these values do not need to be reported immediately.

DIF: Applying/Application REF: 236
KEY: Preoperative nursing| laboratory values
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. An inpatient nurse brings an informed consent form to a client for an operation scheduled for tomorrow. The client asks about possible complications from the operation. What response by the nurse is best?
a. Answer the questions and document that teaching was done.
b. Do not have the client sign the consent and call the surgeon.
c. Have the client sign the consent, then call the surgeon.
d. Remind the client of what teaching the surgeon has done.

ANS: B
In order to give informed consent, the client needs sufficient information. Questions about potential complications should be answered by the surgeon. The nurse should notify the surgeon to come back and answer the clients questions before the client signs the consent form. The other actions are not appropriate.

DIF: Applying/Application REF: 239
KEY: Preoperative nursing| informed consent
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A client has a great deal of pain when coughing and deep breathing after abdominal surgery despite having pain medication. What action by the nurse is best?
a. Call the provider to request more analgesia.
b. Demonstrate how to splint the incision.
c. Have the client take shallower breaths.
d. Tell the client a little pain is expected.

ANS: B
Splinting an incision provides extra support during coughing and activity and helps decrease pain. If the client is otherwise comfortable, no more analgesia is required. Shallow breathing can lead to atelectasis and pneumonia. The client should know some pain is normal and expected after surgery, but that answer alone does not provide any interventions to help the client.

DIF: Applying/Application REF: 243
KEY: Preoperative nursing| nonpharmacologic pain management| splinting
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A nurse is giving a client instructions for showering with special antimicrobial soap the night before surgery. What instruction is most appropriate?
a. After you wash the surgical site, shave that area with your own razor.
b. Be sure to wash the area where you will have surgery very thoroughly.
c. Use a washcloth to wash the surgical site; do not take a full shower or bath.
d. Wash the surgical site first, then shampoo and wash the rest of your body.

ANS: B
The entire proposed surgical site needs to be washed thoroughly and completely with the antimicrobial soap. Shaving, if absolutely necessary, should be done in the operative suite immediately before the operation begins, using sterile equipment. The client needs a full shower or bath (shower preferred). The client should wash the surgical site last; dirty water from shampooing will run over the cleansed site if the site is washed first.

DIF: Applying/Application REF: 241
KEY: Preoperative nursing| client education| skin preparation
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A postoperative client has an abdominal drain. What assessment by the nurse indicates that goals for the priority client problems related to the drain are being met?
a. Drainage from the surgical site is 30 mL less than yesterday.
b. There is no redness, warmth, or drainage at the insertion site.
c. The client reports adequate pain control with medications.
d. Urine is clear yellow and urine output is greater than 40 mL/hr.

ANS: B
The priority client problem related to a surgical drain is the potential for infection. An insertion site that is free of redness, warmth, and drainage indicates that goals for this client problem are being met. The other assessments are normal, but not related to the drain.

DIF: Evaluating/Synthesis REF: 243
KEY: Preoperative nursing| drains
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A client waiting for surgery is very anxious. What intervention can the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Assess the clients anxiety.
b. Give the client a back rub.
c. Remind the client to turn.
d. Teach about postoperative care.

ANS: B
A back rub reduces anxiety and can be delegated to the UAP. Once teaching has been done, the UAP can remind the client to turn, but this is not related to relieving anxiety. Assessing anxiety and teaching are not within the scope of practice for the UAP.

DIF: Applying/Application REF: 246
KEY: Preoperative nursing| anxiety| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. A client who collapsed during dinner in a restaurant arrives in the emergency department. The client is going to surgery to repair an abdominal aortic aneurysm. What medication does the nurse prepare to administer as a priority for this client?
a. Hydroxyzine (Atarax)
b. Lorazepam (Ativan)
c. Metoclopramide (Reglan)
d. Morphine sulfate

ANS: C
Reglan increases gastric emptying, an important issue for this client who was eating just prior to the operation. The other drugs are appropriate for any surgical client.

DIF: Applying/Application REF: 247
KEY: Preoperative nursing| metoclopramide| gastric emptying
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A client in the preoperative holding room has received sedation and now needs to urinate. What action by the nurse is best?
a. Allow the client to walk to the bathroom.
b. Delegate assisting the client to the nurses aide.
c. Give the client a bedpan or urinal to use.
d. Insert a urinary catheter now instead of waiting.

ANS: C
Although possibly uncomfortable or embarrassing for the client, the client should not be allowed out of bed after receiving sedation. The nurse should get the client a bedpan or urinal. The client may or may not need a urinary catheter.

DIF: Applying/Application REF: 247
KEY: Preoperative nursing| sedation| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A student is caring for clients in the preoperative area. The nurse contacts the surgeon about a client whose heart rate is 120 beats/min. After consulting with the surgeon, the nurse administers a beta blocker to the client. The student asks why this was needed. What response by the nurse is best?
a. A rapid heart rate requires more effort by the heart.
b. Anesthesia has bad effects if the client is tachycardic.
c. The client may have an undiagnosed heart condition.
d. When the heart rate goes up, the blood pressure does too.

ANS: A
Tachycardia increases the workload of the heart and requires more oxygen delivery to the myocardial tissues. This added strain is not needed on top of the physical and emotional stress of surgery. The other statements are not accurate.

DIF: Applying/Application REF: 232
KEY: Preoperative nursing| tachycardia| beta blocker
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

14. The perioperative nurse manager and the postoperative unit manager are concerned about the increasing number of surgical infections in their hospital. What action by the managers is best?

a. Audit charts to see if the Surgical Care Improvement Project (SCIP) outcomes were met.
b. Encourage staff on both units to provide peer pressure to adhere to hand hygiene policy.
c. Hold educational meetings with the nursing and surgical staff on infection prevention.
d. Monitor staff on both units for consistent adherence to established hand hygiene practices.

ANS: A
The SCIP project contains core measures that are mandatory for all surgical clients and focuses on preventing infection, serious cardiac events, and venous thromboembolism. The managers should start by reviewing charts to see if the guidelines of this project were implemented. The other actions may be necessary too, but first the managers need to assess the situation.

DIF: Applying/Application REF: 229
KEY: Preoperative nursing| Surgical Care Improvement Project (SCIP)| infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse assesses a client in the preoperative holding area and finds brittle nails and hair, dry skin turgor, and muscle wasting. What action by the nurse is best?
a. Consult the surgeon about a postoperative dietitian referral.
b. Document the findings thoroughly in the clients chart.
c. Encourage the client to eat more after recovering from surgery.
d. Refer the client to Meals on Wheels after discharge.

ANS: A
This client has signs of malnutrition, which can impact recovery from surgery. The nurse should consult the surgeon about prescribing a consultation with a dietitian in the postoperative period. The nurse should document the findings but needs to do more. Encouraging the client to eat more may be helpful, but the client needs a professional nutritional assessment so that the appropriate diet and supplements can be ordered. The client may or may not need Meals on Wheels after discharge.

DIF: Applying/Application REF: 235
KEY: Preoperative nursing| malnutrition| nutrition
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16. A nurse is concerned that a preoperative client has a great deal of anxiety about the upcoming procedure. What action by the nurse is best?
a. Ask the client to describe current feelings.
b. Determine if the client wants a chaplain.
c. Reassure the client this surgery is common.
d. Tell the client there is no need to be anxious.

ANS: A
The nurse needs to conduct further assessment of the clients anxiety. Asking open-ended questions about current feelings is an appropriate way to begin. The client may want a chaplain, but the nurse needs to do more for the client. Reassurance can be good, but false hope is not, and simply reassuring the client may not be helpful. Telling the client not to be anxious belittles the clients feelings.

DIF: Applying/Application REF: 235
KEY: Preoperative nursing| anxiety| support
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

17. A client has been given hydroxyzine (Atarax) in the preoperative holding area. What action by the nurse is most important for this client?
a. Document giving the drug.
b. Raise the siderails on the bed.
c. Record the clients vital signs.
d. Teach relaxation techniques.

ANS: B
All actions are appropriate for a preoperative client. However, for client safety, the nurse should raise the siderails on the bed because hydroxyzine can make the client sleepy.

DIF: Applying/Application REF: 247
KEY: Preoperative nursing| safety| hydroxyzine
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

18. A client is on the phone when the nurse brings a preoperative antibiotic before scheduled surgery. The circulating nurse has requested the antibiotic be started. The client wants the nurse to wait before starting it. What response by the nurse is most appropriate?
a. Explain the rationale for giving the medicine now.
b. Leave the room and come back in 15 minutes.
c. Provide holistic client care and come back later.
d. Tell the client you must start the medication now.

ANS: A
The preoperative antibiotic must be given within 60 minutes of the surgical start time to ensure the proper amount is in the tissues when the incision is made. The nurse should explain the rationale to the client for this timing. The other options do not take this timing into consideration and do not give the client the information needed to be cooperative.

DIF: Applying/Application REF: 247
KEY: Preoperative nursing| antibiotic| Surgical Care Improvement Project (SCIP)
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

19. A nurse is giving a preoperative client a dose of ranitidine (Zantac). The client asks why the nurse is giving this drug when the client has no history of ulcers. What response by the nurse is best?
a. All preoperative clients get this medication.
b. It helps prevent ulcers from the stress of the surgery.
c. Since you dont have ulcers, I will have to ask.
d. The physician prescribed this medication for you.

ANS: B
Ulcer prophylaxis is common for clients undergoing long procedures or for whom high stress is likely. The nurse is not being truthful by saying all clients get this medication. If the nurse does not know the information, it is appropriate to find out, but this is a common medication for which the nurse should know the rationale prior to administering it. Simply stating that the physician prescribed the medication does not give the client any useful information.

DIF: Understanding/Comprehension REF: 247
KEY: Preoperative nursing| histamine blocker| ulcers
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A new perioperative nurse is receiving orientation to the surgical area and learns about the Surgical Care Improvement Project (SCIP) goals. What major areas do these measures focus on preventing? (Select all that apply.)
a. Hemorrhage
b. Infection
c. Serious cardiac events
d. Stroke
e. Thromboembolism

ANS: B, C, E
The SCIP project includes core measures to prevent infection, serious cardiac events, and thromboembolic events such as deep vein thrombosis.

DIF: Remembering/Knowledge REF: 229
KEY: Preoperative nursing| Surgical Care Improvement Project (SCIP)| core measures
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A nursing instructor is teaching students about different surgical procedures and their classifications. Which examples does the instructor include? (Select all that apply.)
a. Hemicolectomy: diagnostic
b. Liver biopsy: diagnostic
c. Mastectomy: restorative
d. Spinal cord decompression: palliative
e. Total shoulder replacement: restorative

ANS: B, E
A diagnostic procedure is used to determine cell type of cancer and to determine the cause of a problem. An example is a liver biopsy. A restorative procedure aims to improve functional ability. An example would be a total shoulder replacement or a spinal cord decompression (not palliative). A curative procedure either removes or repairs the causative problem. An example would be a mastectomy (not restorative) or a hemicolectomy (not diagnostic). A palliative procedure relieves symptoms but will not cure the disease. An example is an ileostomy. A cosmetic procedure is done to improve appearance. An example is rhinoplasty (a nose job).

DIF: Remembering/Knowledge REF: 231
KEY: Preoperative nursing| surgical procedures
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is caring for several clients prior to surgery. Which medications taken by the clients require the nurse to consult with the physician about their administration? (Select all that apply.)
a. Metformin (Glucophage)
b. Omega-3 fatty acids (Sea Omega 30)
c. Phenytoin (Dilantin)
d. Pilocarpine hydrochloride (Isopto Carpine)
e. Warfarin (Coumadin)

ANS: A, C, D, E
Although the client will be on NPO status before surgery, the nurse should check with the provider about allowing the client to take medications prescribed for diabetes, hypertension, cardiac disease, seizure disorders, depression, glaucoma, anticoagulation, or depression. Metformin is used to treat diabetes; phenytoin is for seizures; pilocarpine is for glaucoma, and warfarin is an anticoagulant. The omega-3 fatty acids can be held the day of surgery.

DIF: Analyzing/Analysis REF: 241
KEY: Preoperative nursing| medications| NPO
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse recently hired to the preoperative area learns that certain clients are at higher risk for venous thromboembolism (VTE). Which clients are considered at high risk? (Select all that apply.)
a. Client with a humerus fracture
b. Morbidly obese client
c. Client who underwent a prolonged surgical procedure
d. Client with severe heart failure
e. Wheelchair-bound client

ANS: B, C, D, E

All surgical clients should be assessed for VTE risk. Those considered at higher risk include those who are obese; are over 40; have cancer; have decreased mobility, immobility, or a spinal cord injury; have a history of any thrombotic event, varicose veins, or edema; take oral contraceptives or smoke; have decreased cardiac output; have a hip fracture; or are having total hip or knee surgery. Prolonged surgical time increases risk due to mobility and positioning needs.

DIF: Remembering/Knowledge REF: 244
KEY: Preoperative nursing| venous thromboembolism prevention
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A student nurse is caring for clients on the postoperative unit. The student asks the registered nurse why malnutrition can lead to poor surgical outcomes. What responses by the nurse are best? (Select all that apply.)
a. A malnourished client will have fragile skin.
b. Malnourished clients always have other problems.
c. Many drugs are bound to protein in the body.
d. Protein stores are needed for wound healing.
e. Weakness and fatigue are common in malnutrition.

ANS: A, C, D, E
Malnutrition can lead to poorer surgical outcomes for several reasons, including fragile skin that might break down, altered pharmacokinetics, poorer wound healing, and weakness or fatigue that can interfere with recovery. Malnutrition can exist without other comorbidities.

DIF: Understanding/Comprehension REF: 235
KEY: Preoperative nursing| nutrition| malnutrition
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A student nurse asks why older adults are at higher risk for complications after surgery. What reasons does the registered nurse give? (Select all that apply.)
a. Decreased cardiac output
b. Decreased oxygenation
c. Frequent nocturia
d. Mobility alterations
e. Inability to adapt to changes

ANS: A, B, C, D
Older adults have many age-related physiologic changes that put them at higher risk of falling and other complications after surgery. Some of these include decreased cardiac output, decreased oxygenation of tissues, nocturia, and mobility alterations. They also have a decreased ability to adapt to new surroundings, but that is not the same as being unable to adapt.

DIF: Understanding/Comprehension REF: 233
KEY: Preoperative nursing| older adult MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

7. A client is clearly uncomfortable and anxious in the preoperative holding room waiting for emergent abdominal surgery. What actions can the nurse perform to increase comfort? (Select all that apply.)
a. Allow the client to assume a position of comfort.
b. Allow the clients family to remain at the bedside.
c. Give the client a warm, non-caffeinated drink.
d. Provide warm blankets or cool washcloths as desired.
e. Pull the curtains around the bed to provide privacy.

ANS: A, B, D, E
There are many nonpharmacologic comfort measures the nurse can employ, such as allowing the client to remain in the position that is most comfortable, letting the family stay with the client, providing warmth or cooling measures as requested by the client, and providing privacy. The client in the preoperative holding area

is NPO, so drinks should not be provided.

DIF: Applying/Application REF: 246
KEY: Preoperative nursing| comfort
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A nurse working in the preoperative holding area performs which functions to ensure client safety? (Select all that apply.)
a. Allow small sips of plain water.
b. Check that consent is on the chart.
c. Ensure the client has an armband on.
d. Have the client help mark the surgical site.
e. Allow the client to use the toilet before giving sedation.

ANS: B, C, D, E
Providing for client safety is a priority function of the preoperative nurse. Checking for appropriately completed consent, verifying the clients identity, having the client assist in marking the surgical site if applicable, and allowing the client to use the toilet prior to sedating him or her are just some examples of important safety measures. The preoperative client should be NPO, so water should not be provided.

DIF: Applying/Application REF: 229
KEY: Preoperative nursing| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 15: Care of Intraoperative Patients

MULTIPLE CHOICE

1. The circulating nurse is plugging in a piece of equipment and notes that the cord is frayed. What action by the nurse is best?
a. Call maintenance for repair.
b. Check the machine before using.
c. Get another piece of equipment.
d. Notify the charge nurse.

ANS: C
The circulating nurse is responsible for client safety. If an electrical cord is frayed, the risk of fire or sparking increases. The nurse should obtain a replacement. The nurse should also tag the original equipment for repair as per agency policy. Checking the equipment is not important as the nurse should not even attempt to use it. Calling maintenance or requesting maintenance per facility protocol is important, but first ensure client safety by having a properly working piece of equipment for the procedure about to take place. The charge nurse probably does need to know of the need for equipment repair, but ensuring client safety is the priority.

DIF: Applying/Application REF: 252
KEY: Intraoperative nursing| circulating nurse| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. The circulating nurse and preoperative nurse are reviewing the chart of a client scheduled for minimally invasive surgery (MIS). What information on the chart needs to be reported to the surgeon as a priority?
a. Allergies noted and allergy band on
b. Consent for MIS procedure only
c. No prior anesthesia exposure
d. NPO status for the last 8 hours

ANS: B
All MIS procedures have the potential for becoming open procedures depending on findings and complications. The clients consent should include this possibility. The nurse should report this finding to the surgeon prior to surgery taking place. Having allergies noted and an allergy band applied is standard procedure. Not having any prior surgical or anesthesia exposure is not the priority. Maintaining NPO status as prescribed is standard procedure.

DIF: Applying/Application REF: 263
KEY: Intraoperative care| informed consent| circulating nurse
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A client is having robotic surgery. The circulating nurse observes the instruments being inserted, then the surgeon appears to break scrub when going to the console and sitting down. What action by the nurse is best?
a. Call a time-out to discuss sterile procedure and scrub technique.
b. Document the time the robotic portion of the procedure begins.
c. Inform the surgeon that the scrub preparation has been compromised.
d. Report the surgeons actions to the charge nurse and unit manager.

ANS: B
During a robotic operative procedure, the surgeon inserts the articulating arms into the client, then breaks scrub to sit at the viewing console to perform the operation. The nurse should document the time the robotic portion of the procedure began. There is no need for the other interventions.

DIF: Applying/Application REF: 255
KEY: Intraoperative care| circulating nurse| robotic technology| sterile procedure
MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. The circulating nurse is in the operating room and sees the surgeon don gown and gloves using appropriate sterile procedure. The surgeon then folds the hands together and places them down below the hips. What action by the nurse is most appropriate?
a. Ask the surgeon to change the sterile gown.
b. Do nothing; this is acceptable sterile procedure.
c. Inform the surgeon that the sterile field has been broken.
d. Obtain a new pair of sterile gloves for the surgeon to put on.

ANS: C
The surgical gown is considered sterile from the chest to the level of the surgical field. By placing the hands down by the hips, the surgeon has broken sterile field. The circulating nurse informs the surgeon of this breach. Changing only the gloves or only the gown does not restore the sterile sections of the gown. Doing nothing is unacceptable.

DIF: Applying/Application REF: 257
KEY: Intraoperative nursing| sterile field| surgical scrub| surgical gowning
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A client is in stage 2 of general anesthesia. What action by the nurse is most important?
a. Keeping the room quiet and calm
b. Being prepared to suction the airway
c. Positioning the client correctly
d. Warming the client with blankets

ANS: B
During stage 2 of general anesthesia (excitement, delirium), the client can vomit and aspirate. The nurse must be ready to react to this potential occurrence by being prepared to suction the clients airway. Keeping the room quiet and calm does help the client enter the anesthetic state, but is not the priority. Positioning the client usually occurs during stage 3 (operative anesthesia). Keeping the client warm is important throughout to prevent hypothermia.

DIF: Applying/Application REF: 259
KEY: Intraoperative nursing| stages of anesthesia| airway
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A client is having surgery. The circulating nurse notes the clients oxygen saturation is 90% and the heart rate is 110 beats/min. What action by the nurse is best?
a. Assess the clients end-tidal carbon dioxide level.
b. Document the findings in the clients chart.
c. Inform the anesthesia provider of these values.
d. Prepare to administer dantrolene sodium (Dantrium).

ANS: A
Malignant hyperthermia is a rare but serious reaction to anesthesia. The triad of early signs include decreased oxygen saturation, tachycardia, and elevated end-tidal carbon dioxide (CO_2) level. The nurse should quickly check the end-tidal CO_2 and then report findings to the anesthesia provider and surgeon. Documentation is vital, but not the most important action at this stage. Dantrolene sodium is the drug of choice if the client does have malignant hyperthermia.

DIF: Applying/Application REF: 259
KEY: Intraoperative nursing| malignant hyperthermia| dantrolene sodium
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse is monitoring a client after moderate sedation. The nurse documents the clients Ramsay Sedation

Scale (RSS) score at 3. What action by the nurse is best?
a. Assess the clients gag reflex.
b. Begin providing discharge instructions.
c. Document findings and continue to monitor.
d. Increase oxygen and notify the provider.

ANS: C
An RSS score of 3 means the client is able to respond quickly, but only to commands. The client has not had enough time to fully arouse. The nurse should document the findings and continue to monitor per agency policy. If the client had an oral endoscopy or was intubated, checking the gag reflex would be appropriate prior to permitting eating or drinking. The client is not yet awake enough for teaching. There is no need to increase oxygen and notify the provider.

DIF: Applying/Application REF: 263
KEY: Intraoperative nursing| Ramsay Sedation Scale| moderate sedation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A client is scheduled for a below-the-knee amputation. The circulating nurse ensures the proper side is marked prior to the start of surgery. What action by the nurse is most appropriate?
a. Facilitate marking the site with the client and surgeon.
b. Have the client mark the operative site.
c. Mark the operative site with a waterproof marker.
d. Tell the surgeon it is time to mark the surgical site.

ANS: A
The Joint Commission now recommends that both the client and the surgeon mark the operative site together in order to prevent wrong-site surgery. The nurse should facilitate this process.

DIF: Applying/Application REF: 263
KEY: Intraoperative nursing| wrong-site surgery| The Joint Commission National Patient Safety Goals MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A client has received intravenous anesthesia during an operation. What action by the postanesthesia care nurse is most important?
a. Assist with administering muscle relaxants to the client.
b. Place the client on a cardiac monitor and pulse oximeter.
c. Prepare to administer intravenous antiemetics to the client.
d. Prevent the client from experiencing postoperative shivering.

ANS: B
Intravenous anesthetic agents have the potential to cause respiratory and circulatory depression. The nurse should ensure the client is on a cardiac monitor and pulse oximeter. Muscle relaxants are not indicated for this client at this time. Intravenous anesthetics have a lower rate of postoperative nausea and vomiting than other types. Shivering can occur in any client, but is more common after inhalation agents.

DIF: Applying/Application REF: 259
KEY: Intraoperative nursing| anesthetic agents| inhalation agents
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A circulating nurse has transferred an older client to the operating room. What action by the nurse is most important for this client?
a. Allow the client to keep hearing aids in until anesthesia begins.
b. Pad the table as appropriate for the surgical procedure.
c. Position the client for maximum visualization of the site.
d. Stay with the client, providing emotional comfort and support.

ANS: A
Many older clients have sensory loss. To help prevent disorientation, facilities often allow older clients to keep their eyeglasses on and hearing aids in until the start of anesthesia. The other actions are appropriate for all operative clients.

DIF: Remembering/Knowledge REF: 264
KEY: Intraoperative nursing| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

11. A circulating nurse wishes to provide emotional support to a client who was just transferred to the operating room. What action by the nurse would be best?
a. Administer anxiolytics.
b. Give the client warm blankets.
c. Introduce the surgical staff.
d. Remain with the client.

ANS: D
The nurse can provide emotional support by remaining with the client until anesthesia has been provided. An extremely anxious client may need anxiolytics, but not all clients require this for emotional support. Physical comfort and introductions can also help decrease anxiety.

DIF: Applying/Application REF: 264
KEY: Intraoperative nursing| anxiety| comfort
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Psychosocial Integrity

12. A client in the operating room has developed malignant hyperthermia. The clients potassium is 6.5 mEq/L. What action by the nurse takes priority?
a. Administer 10 units of regular insulin.
b. Administer nifedipine (Procardia).
c. Assess urine for myoglobin or blood.
d. Monitor the client for dysrhythmias.

ANS: A
For hyperkalemia in a client with malignant hyperthermia, the nurse administers 10 units of regular insulin in 50 mL of 50% dextrose. This will force potassium back into the cells rapidly. Nifedipine is a calcium channel blocker used to treat hypertension and dysrhythmias, and should not be used in a client with malignant hyperthermia. Assessing the urine for blood or myoglobin is important, but does not take priority. Monitoring the client for dysrhythmias is also important due to the potassium imbalance, but again does not take priority over treating the potassium imbalance.

DIF: Applying/Application REF: 260
KEY: Intraoperative nursing| malignant hyperthermia| hyperkalemia
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A student nurse observing in the operating room notes that the functions of the Certified Registered Nurse First Assistant (CRNFA) include which activities? (Select all that apply.)
a. Dressing the surgical wound
b. Grafting new or synthetic skin
c. Reattaching severed nerves
d. Suctioning the surgical site
e. Suturing the surgical wound

ANS: A, D, E
The CRNFA can perform tasks under the direction of the surgeon such as suturing and dressing surgical

wounds, cutting away tissue, suctioning the wound to improve visibility, and holding retractors. Reattaching severed nerves and performing grafts would be the responsibility of the surgeon.

DIF: Remembering/Knowledge REF: 252
KEY: Surgery| Certified Registered Nurse First Assistant (CRNFA)
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. The nursing student observing in the perioperative area notes the unique functions of the circulating nurse, which include which roles? (Select all that apply.)
a. Ensuring the clients safety
b. Accounting for all sharps
c. Documenting all care given
d. Maintaining the sterile field
e. Monitoring traffic in the room

ANS: A, E
The circulating nurse has several functions, including maintaining client safety and privacy, monitoring traffic in and out of the operating room, assessing fluid losses, reporting findings to the surgeon and anesthesia provider, anticipating needs of the team, and communicating to the family. The circulating nurse and scrub person work together to ensure accurate counts of sharps, sponges, and instruments. The circulating nurse also documents care, but in the perioperative area, the preoperative or holding room nurse would also document care received there. Maintaining the sterile field is a joint responsibility among all members of the surgical team.

DIF: Remembering/Knowledge REF: 252
KEY: Perioperative| circulating nurse MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. The circulating nurse reviews the days schedule and notes clients who are at higher risk of anesthetic overdose and other anesthesia-related complications. Which clients does this include? (Select all that apply.)
a. A 75-year-old client scheduled for an elective procedure
b. Client who drinks a 6-pack of beer each day
c. Client with a serum creatinine of 3.8 mg/dL
d. Client who is taking birth control pills
e. Young male client with a RYR1 gene mutation

ANS: A, B, C, E
People at higher risk for anesthetic overdose or other anesthesia-related complications include people with a slowed metabolism (older adults generally have slower metabolism than younger adults), those with kidney or liver impairments, and those with mutations of the RYR1 gene. Drinking a 6-pack of beer per day possibly indicates some liver disease; a creatinine of 3.8 is high, indicating renal disease; and the genetic mutation increases the chance of malignant hyperthermia. Taking birth control pills is not a risk factor.

DIF: Analyzing/Analysis REF: 260
KEY: Intraoperative nursing| anesthesia
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A client is having shoulder surgery with regional anesthesia. What actions by the nurse are most important to enhance client safety related to this anesthesia? (Select all that apply.)
a. Assessing distal circulation to the operative arm after positioning
b. Keeping the client warm during the operative procedure
c. Padding the clients shoulder and arm on the operating table
d. Preparing to suction the clients airway if the client vomits
e. Speaking in a low, quiet voice as anesthesia is administered

ANS: A, C
After regional anesthesia is administered, the client loses all sensation distally. The nurse ensures client safety

by assessing distal circulation and padding the shoulder and arm appropriately. Although awake, the client will not be able to report potential injury. Keeping the client warm is not related to this anesthesia, nor is suctioning or speaking quietly.

DIF: Applying/Application REF: 261
KEY: Intraoperative nursing| regional anesthesia
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. What actions by the circulating nurse are important to promote client comfort? (Select all that apply.)
a. Correct positioning
b. Introducing ones self
c. Providing warmth
d. Remaining present
e. Removing hearing aids

ANS: A, B, C, D
The circulating nurse can do many things to promote client comfort, including positioning the client correctly and comfortably, introducing herself or himself to the client, keeping the client warm, and remaining present with the client. Removing hearing aids does not promote comfort and, if the client is still awake when they are removed, may contribute to disorientation and anxiety.

DIF: Remembering/Knowledge REF: 252
KEY: Intraoperative nursing| comfort
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

SHORT ANSWER

1. A client has developed malignant hyperthermia. The client weighs 136 pounds. What is the safe dose range for one dose of dantrolene sodium (Dantrium)? (Enter your answer using whole numbers, separated by a hyphen with no spaces.) _____ mg

ANS:
124-186 mg
The dose of dantrolene is 2 to 3 mg/kg. The client weighs 62 kg, so the safe dose range is 124 to 186 mg.

DIF: Applying/Application REF: 260
KEY: Intraoperative nursing| dantrolene sodium| malignant hyperthermia
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 16: Care of Postoperative Patients

MULTIPLE CHOICE

1. A client has arrived in the postoperative unit. What action by the circulating nurse takes priority?
a. Assessing fluid and blood output
b. Checking the surgical dressings
c. Ensuring the client is warm
d. Participating in hand-off report

ANS: D
Hand-offs are a critical time in client care, and poor communication during this time can lead to serious errors. The postoperative nurse and circulating nurse participate in hand-off report as the priority. Assessing fluid losses and dressings can be done together as part of the report. Ensuring the client is warm is a lower priority.

DIF: Applying/Application REF: 271
KEY: Postoperative nursing| communication| hand-off communication| SBAR
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. The postanesthesia care unit (PACU) charge nurse notes vital signs on four postoperative clients. Which client should the nurse assess first?
a. Client with a blood pressure of 100/50 mm Hg
b. Client with a pulse of 118 beats/min
c. Client with a respiratory rate of 6 breaths/min
d. Client with a temperature of 96 F (35.6 C)

ANS: C
The respiratory rate is the most critical vital sign for any client who has undergone general anesthesia or moderate sedation, or has received opioid analgesia. This respiratory rate is too low and indicates respiratory depression. The nurse should assess this client first. A blood pressure of 100/50 mm Hg is slightly low and may be within that clients baseline. A pulse of 118 beats/min is slightly fast, which could be due to several causes, including pain and anxiety. A temperature of 96 F is slightly low and the client needs to be warmed. But none of these other vital signs take priority over the respiratory rate.

DIF: Applying/Application REF: 272
KEY: Postoperative nursing| nursing assessment| sedation| respiratory system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A postoperative nurse is caring for a client whose oxygen saturation dropped from 98% to 95%. What action by the nurse is most appropriate?
a. Assess other indicators of oxygenation.
b. Call the Rapid Response Team.
c. Notify the anesthesia provider.
d. Prepare to intubate the client.

ANS: A
If a postoperative clients oxygen saturation (SaO2) drops below 95% (or the clients baseline), the nurse should notify the anesthesia provider. If the SaO2 drops by 10% or more, the nurse should call the Rapid Response Team. Since this is approximately a 3% drop, the nurse should further assess the client. Intubation (if the client is not intubated already) is not warranted.

DIF: Applying/Application REF: 273
KEY: Postoperative nursing| nursing assessment| respiratory assessment| oxygen saturation
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. Ten hours after surgery, a postoperative client reports that the antiembolism stockings and sequential

compression devices itch and are too hot. The client asks the nurse to remove them. What response by the nurse is best?
a. Let me call the surgeon to see if you really need them.
b. No, you have to use those for 24 hours after surgery.
c. OK, we can remove them since you are stable now.
d. To prevent blood clots you need them a few more hours.

ANS: D
According to the Surgical Care Improvement Project (SCIP), any prophylactic measures to prevent thromboembolic events during surgery are continued for 24 hours afterward. The nurse should explain this to the client. Calling the surgeon is not warranted. Simply telling the client he or she has to wear the hose and compression devices does not educate the client. The nurse should not remove the devices.

DIF: Understanding/Comprehension REF: 274
KEY: Postoperative nursing| Surgical Care Improvement Project (SCIP)| venous thromboembolism prevention| thromboembolic events| core measures| quality improvement
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A client had a surgical procedure with spinal anesthesia. The nurse raises the head of the clients bed. The clients blood pressure changes from 122/78 mm Hg to 102/50 mm Hg. What action by the nurse is best?
a. Call the Rapid Response Team.
b. Increase the IV fluid rate.
c. Lower the head of the bed.
d. Nothing; this is expected.

ANS: C
A client who had epidural or spinal anesthesia may become hypotensive when the head of the bed is raised. If this occurs, the nurse should lower the head of the bed to its original position. The Rapid Response Team is not needed, nor is an increase in IV rate.

DIF: Applying/Application REF: 275
KEY: Postoperative nursing| neurologic system
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A postoperative client vomited. After cleaning and comforting the client, which action by the nurse is most important?
a. Allow the client to rest.
b. Auscultate lung sounds.
c. Document the episode.
d. Encourage the client to eat dry toast.

ANS: B
Vomiting after surgery has several complications, including aspiration. The nurse should listen to the clients lung sounds. The client should be allowed to rest after an assessment. Documenting is important, but the nurse needs to be able to document fully, including an assessment. The client should not eat until nausea has subsided.

DIF: Applying/Application REF: 276
KEY: Postoperative nursing| nausea and vomiting| respiratory assessment| nursing assessment MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A postoperative client has just been admitted to the postanesthesia care unit (PACU). What assessment by the PACU nurse takes priority?
a. Airway
b. Bleeding
c. Breathing

d. Cardiac rhythm

ANS: A
Assessing the airway always takes priority, followed by breathing and circulation. Bleeding is part of the circulation assessment, as is cardiac rhythm.

DIF: Applying/Application REF: 280
KEY: Postoperative nursing| nursing assessment| respiratory assessment| respiratory system| postanesthesia care unit (PACU)| airway
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A postoperative client has respiratory depression after receiving midazolam (Versed) for sedation. Which IV-push medication and dose does the nurse prepare to administer?
a. Flumazenil (Romazicon) 0.2 to 1 mg
b. Flumazenil (Romazicon) 2 to 10 mg
c. Naloxone (Narcan) 0.4 to 2 mg
d. Naloxone (Narcan) 4 to 20 mg

ANS: A
Flumazenil is a benzodiazepine antagonist and would be the correct drug to use in this situation. The correct dose is 0.2 to 1 mg. Naloxone is an opioid antagonist.

DIF: Remembering/Knowledge REF: 280
KEY: Postoperative nursing| nursing intervention| benzodiazepine antagonist| critical rescue MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A nurse is caring for a postoperative client who reports discomfort, but denies serious pain and does not want medication. What action by the nurse is best to promote comfort?
a. Assess the clients pain on a 0-to-10 scale.
b. Assist the client into a position of comfort.
c. Have the client sit up in a recliner.
d. Tell the client when pain medication is due.

ANS: B
Several nonpharmacologic comfort measures can help postoperative clients with their pain, including distraction, music, massage, guided imagery, and positioning. The nurse should help this client into a position of comfort considering the surgical procedure and position of any tubes or drains. Assessing the clients pain is important but does not improve comfort. The client may be more uncomfortable in a recliner. Letting the client know when pain medication can be given next is important but does not improve comfort.

DIF: Applying/Application REF: 283
KEY: Postoperative nursing| pain| nonpharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

10. A nurse is preparing a client for discharge after surgery. The client needs to change a large dressing and manage a drain at home. What instruction by the nurse is most important?
a. Be sure you keep all your postoperative appointments.
b. Call your surgeon if you have any questions at home.
c. Eat a diet high in protein, iron, zinc, and vitamin C.
d. Wash your hands before touching the drain or dressing.

ANS: D
All options are appropriate for the client being discharged after surgery. However, for this client who is changing a dressing and managing a drain, infection control is the priority. The nurse should instruct the client to wash hands often, including before and after touching the dressing or drain.

DIF: Applying/Application REF: 286
KEY: Postoperative nursing| discharge planning/teaching| client education| infection control| hand hygiene
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. An older adult has been transferred to the postoperative inpatient unit after surgery. The family is concerned that the client is not waking up quickly and states She needs to get back to her old self! What response by the nurse is best?
a. Everyone comes out of surgery differently.
b. Lets just give her some more time, okay?
c. She may have had a stroke during surgery.
d. Sometimes older people take longer to wake up.

ANS: D
Due to age-related changes, it may take longer for an older adult to metabolize anesthetic agents and pain medications, making it appear that they are taking too long to wake up and return to their normal baseline cognitive status. The nurse should educate the family on this possibility. While everyone does react differently, this does not give the family any objective information. Saying Lets just give her more time, okay? sounds patronizing and again does not provide information. While an intraoperative stroke is a possibility, the nurse should concentrate on the more common occurrence of older clients taking longer to fully arouse and awake.

DIF: Understanding/Comprehension REF: 275
KEY: Postoperative nursing| older adult| sedation| neurologic system
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Health Promotion and Maintenance

12. A nurse answers a call light on the postoperative nursing unit. The client states there was a sudden gush of blood from the incision, and the nurse sees a blood spot on the sheet. What action should the nurse take first?
a. Assess the clients blood pressure.
b. Perform hand hygiene and apply gloves.
c. Reinforce the dressing with a clean one.
d. Remove the dressing to assess the wound.

ANS: B
Prior to assessing or treating the drainage from the wound, the nurse performs hand hygiene and dons gloves to protect both the client and nurse from infection.

DIF: Applying/Application REF: 282
KEY: Postoperative nursing| Standard Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A client on the postoperative nursing unit has a blood pressure of 156/98 mm Hg, pulse 140 beats/min, and respirations of 24 breaths/min. The client denies pain, has normal hemoglobin, hematocrit, and oxygen saturation, and shows no signs of infection. What should the nurse assess next?
a. Cognitive status
b. Family stress
c. Nutrition status
d. Psychosocial status

ANS: D
After ensuring the clients physiologic status is stable, these manifestations should lead the nurse to assess the clients psychosocial status. Anxiety especially can be demonstrated with elevations in vital signs. Cognitive and nutrition status are not related. Family stress is a component of psychosocial status.

DIF: Remembering/Knowledge REF: 279
KEY: Postoperative nursing| support| psychosocial response| anxiety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

14. A registered nurse (RN) is watching a nursing student change a dressing and perform care around a Penrose drain. What action by the student warrants intervention by the RN?
a. Cleaning around the drain per agency protocol
b. Placing a new sterile gauze under the drain
c. Securing the drains safety pin to the sheets
d. Using sterile technique to empty the drain

ANS: C
The safety pin that prevents the drain from slipping back into the clients body should be pinned to the clients gown, not the bedding. Pinning it to the sheets will cause it to pull out when the client turns. The other actions are appropriate.

DIF: Applying/Application REF: 282
KEY: Postoperative nursing| drains| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. A nurse orienting to the postoperative area learns which principles about the postoperative period? (Select all that apply.)
a. All phases require the client to be in the hospital.
b. Phase I care may last for several days in some clients.
c. Phase I requires intensive care unit monitoring.
d. Phase II ends when the client is stable and awake.
e. Vital signs may be taken only once a day in phase III.

ANS: B, D, E
There are three phases of postoperative care. Phase I is the most intense, with clients coming right from surgery until they are completely awake and hemodynamically stable. This may take hours or days and can occur in the intensive care unit or the postoperative care unit. Phase II ends when the client is at a presurgical level of consciousness and baseline oxygen saturation, and vital signs are stable. Phase III involves the extended care environment and may continue at home or in an extended care facility if needed.

DIF: Remembering/Knowledge REF: 270
KEY: Postoperative nursing| nursing assessment| surgical procedures
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A postanesthesia care unit (PACU) nurse is assessing a postoperative client with a nasogastric (NG) tube. What laboratory values would warrant intervention by the nurse? (Select all that apply.)
a. Blood glucose: 120 mg/dL
b. Hemoglobin: 7.8 mg/dL
c. pH: 7.68
d. Potassium: 2.9 mEq/L
e. Sodium: 142 mEq/L

ANS: B, C, D
Fluid and electrolyte balance are assessed carefully in the postoperative client because many imbalances can occur. The low hemoglobin may be from blood loss in surgery. The higher pH level indicates alkalosis, possibly from losses through the NG tube. The potassium is very low. The blood glucose is within normal limits for a postsurgical client who has been fasting. The sodium level is normal.

DIF: Applying/Application REF: 276
KEY: Postoperative nursing| nasogastric tube| fluid and electrolyte balance| nursing assessment| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse is admitting an older client for surgery to the inpatient surgical unit. The client relates a prior history of acute confusion after a previous operation. What interventions does the nurse include on the clients plan of care to minimize the potential for this occurring? (Select all that apply.)
a. Allow family and friends to visit as the client desires.
b. Ask the client about coping techniques frequently used.
c. Instruct the nursing assistant to ensure the client is bathed.
d. Place the client in a room secluded at the end of the hall.
e. Provide the client with uninterrupted periods of sleep.

ANS: A, B, C, E
Older clients may have difficulty adjusting to the stress of the hospital environment and illness or surgery. Techniques that are helpful include allowing liberal visitation, assisting the client to use successful coping techniques, and keeping the client bathed and groomed. Sleep deprivation can contribute to confusion, so the nurse ensures the client receives adequate sleep. Secluding the client at the end of the hall may lead to sensory deprivation and loneliness.

DIF: Remembering/Knowledge REF: 281
KEY: Postoperative nursing| coping| psychosocial response| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

4. A postoperative client is being discharged with a prescription for oxycodone hydrochloride with acetaminophen (Percocet). What instructions does the nurse give the client? (Select all that apply.)
a. Check all over-the-counter medications for acetaminophen.
b. Do not take more pills each day than you are prescribed.
c. Eat a diet that is high in fiber and drink lots of water.
d. If this gives you diarrhea, loperamide (Imodium) can help.
e. You shouldnt drive while you are taking this medication.

ANS: A, B, C, E
Percocet is a common opioid analgesic that contains acetaminophen. The client should be taught to check all over-the-counter medications for acetaminophen and to not take more than the prescribed amount of Percocet, as the maximum daily dose of acetaminophen is 3000 mg. Percocet, like all opioid analgesics, can cause constipation, and the client can minimize this by eating a high-fiber diet and drinking plenty of water. Since Percocet can cause drowsiness, the client taking it should not drive or operate machinery. The medication is more likely to cause constipation than diarrhea.

DIF: Applying/Application REF: 283
KEY: Postoperative nursing| discharge planning/teaching| opioid analgesics| acetaminophen| constipation
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A client is experiencing pain after leg surgery but cannot yet have more pain medication. What comfort interventions can the nurse provide? (Select all that apply.)
a. Apply stimulation to the contralateral leg.
b. Assess the clients willingness to try meditation.
c. Elevate the clients operative leg and apply ice.
d. Reduce the noise level in the clients environment.
e. Turn the TV on loudly to distract the client.

ANS: A, B, C, D
There are many nonpharmacologic comfort measures for pain, including applying stimulation to the opposite leg, providing opportunities for meditation, elevation of the leg, applying ice, and reducing noxious stimuli in the environment. Participating in diversional activities is another approach, but simply turning the TV on loudly does not provide a good diversion.

DIF: Remembering/Knowledge REF: 285
KEY: Postoperative nursing| pain| nonpharmacologic pain management| nursing intervention| physical modalities| ice

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. A nurse on the postoperative nursing unit provides care to reduce the incidence of surgical wound infection. What actions are best to achieve this goal? (Select all that apply.)
a. Administering antibiotics for 72 hours
b. Disposing of dressings properly
c. Leaving draining wounds open to air
d. Performing proper hand hygiene
e. Removing and replacing wet dressings

ANS: B, D, E
Interventions necessary to prevent surgical wound infection include proper disposal of soiled dressings, performing proper hand hygiene, and removing wet dressings as they can be a source of infection. Prophylactic antibiotics are given to clients at risk for infection, but are discontinued after 24 hours if no infection is apparent. Draining wounds should always be covered.

DIF: Applying/Application REF: 281
KEY: Postoperative nursing care| infection control| hand hygiene| Surgical Care Improvement Project (SCIP)| wound infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

COMPLETION

1. A postoperative client has the following orders:
IV lactated Ringers 125 mL/hr
NG tube to low continuous suction
Replace NG output every 4 hours with normal saline over 4 hours
Morphine sulfate 2 mg IV push every hour as needed for pain
NPO
Up in chair tonight
At 1600 (4:00 PM), the nurse measures the nasogastric (NG) output from noon to be 200 mL. What is the clients total IV rate for the next 4 hours? (Record your answer using a whole number.) _____ mL/hr

ANS:
175 mL/hr
200 mL of NG output 4 hours = 50 mL/hr.
125 mL/hr + 50 mL/hr = 175 mL/hr.

DIF: Applying/Application REF: 277
KEY: Postoperative nursing| nasogastric tube| IV fluids
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 17: Inflammation and Immunity

MULTIPLE CHOICE

1. The student nurse learns that the most important function of inflammation and immunity is which purpose?
a. Destroying bacteria before damage occurs
b. Preventing any entry of foreign material
c. Providing protection against invading organisms
d. Regulating the process of self-tolerance

ANS: C
The purpose of inflammation and immunity is to provide protection to the body against invading organisms, whether they are bacterial, viral, protozoal, or fungal. These systems eliminate, destroy, or neutralize the offending agents. The cells of the immune system are the only cells that can distinguish self from non-self. This function is generalized and incorporates destroying bacteria, preventing entry of foreign invaders, and regulating self-tolerance.

DIF: Remembering/Knowledge REF: 289
KEY: Immunity| inflammation| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is assessing an older client for the presence of infection. The clients temperature is 97.6 F (36.4 C). What response by the nurse is best?
a. Assess the client for more specific signs.
b. Conclude that an infection is not present.
c. Document findings and continue to monitor.
d. Request that the provider order blood cultures.

ANS: A
Because older adults have decreased immune function, including reduced neutrophil function, fever may not be present during an episode of infection. The nurse should assess the client for specific signs of infection. Documentation needs to occur, but a more thorough assessment comes first. Blood cultures may or may not be needed depending on the results of further assessment.

DIF: Applying/Application REF: 291
KEY: Infection| inflammation| immunity| older adult| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

3. A client is taking prednisone to prevent transplant rejection. What instruction by the nurse is most important?
a. Avoid large crowds and people who are ill.
b. Check over-the-counter meds for acetaminophen.
c. Take this medicine exactly as prescribed.
d. You have a higher risk of developing cancer.

ANS: A
Prednisone, like all steroids, decreases immune function. The client should be advised to avoid large crowds and people who are ill. Prednisone does not contain acetaminophen. All clients should be taught to take medications exactly as prescribed. A higher risk for cancer is seen with drugs from the calcineurin inhibitor category, such as tacrolimus (Prograf).

DIF: Understanding/Comprehension REF: 301
KEY: Inflammation| immunity| infection control| client teaching
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A clinic nurse is working with an older client. What assessment is most important for preventing infections

in this client?
a. Assessing vaccination records for booster shot needs
b. Encouraging the client to eat a nutritious diet
c. Instructing the client to wash minor wounds carefully
d. Teaching hand hygiene to prevent the spread of microbes

ANS: A
Older adults may have insufficient antibodies that have already been produced against microbes to which they have been exposed. Therefore, older adults need booster shots for many vaccinations they received as younger people. A nutritious diet, proper wound care, and hand hygiene are relevant for all populations.

DIF: Understanding/Comprehension REF: 291
KEY: Immunity| inflammation| older adult| vaccinations
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

5. A client has a leg wound that is in the second stage of the inflammatory response. For what manifestation does the nurse assess?
a. Noticeable rubor
b. Purulent drainage
c. Swelling and pain
d. Warmth at the site

ANS: B
During the second phase of the inflammatory response, neutrophilia occurs, producing pus. Rubor (redness), swelling, pain, and warmth are cardinal signs of the general inflammatory process.

DIF: Remembering/Knowledge REF: 295
KEY: Inflammation| immunity| inflammatory response| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nursing student learning about antibody-mediated immunity learns that the cell with the most direct role ir this process begins development in which tissue or organ?
a. Bone marrow
b. Spleen
c. Thymus
d. Tonsils

ANS: A
The B cell is the primary cell in antibody-mediated immunity and is released from the bone marrow. These cells then travel to other organs and tissues, known as the secondary lymphoid tissues for B cells.

DIF: Remembering/Knowledge REF: 295
KEY: Immunity| inflammation| antibody-mediated immunity| B cell| bone marrow
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. The nurse understands that which type of immunity is the longest acting?
a. Artificial active
b. Inflammatory
c. Natural active
d. Natural passive

ANS: C
Natural active immunity is the most effective and longest acting type of immunity. Artificial and natural passive do not last as long. Inflammatory is not a type of immunity.

DIF: Remembering/Knowledge REF: 299

KEY: Immunity| inflammation| antibody-mediated immunity
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. The nurse working with clients who have autoimmune diseases understands that what component of cell-mediated immunity is the problem?
a. CD4+ cells
b. Cytotoxic T cells
c. Natural killer cells
d. Suppressor T cells

ANS: D
Suppressor T cells help prevent hypersensitivity to ones own cells, which is the basis for autoimmune disease. CD4+ cells are also known as helper/inducer cells, which secrete cytokines. Natural killer cells have direct cytotoxic effects on some non-self cells without first being sensitized. Suppressor T cells have an inhibitory action on the immune system. Cytotoxic T cells are effective against self cells infected by parasites such as viruses or protozoa.

DIF: Remembering/Knowledge REF: 296
KEY: Immunity| inflammation| cell-mediated immunity
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9. A client has been on dialysis for many years and now is receiving a kidney transplant. The client experiences hyperacute rejection. What treatment does the nurse prepare to facilitate?
a. Dialysis
b. High-dose steroid administration
c. Monoclonal antibody therapy
d. Plasmapheresis

ANS: A
Hyperacute rejection starts within minutes of transplantation and nothing will stop the process. The organ is removed. If the client survives, he or she will have to return to dialysis treatment. Steroids, monoclonal antibodies, and plasmapheresis are ineffective against this type of rejection.

DIF: Applying/Application REF: 300
KEY: Immunity| inflammation| rejection| hyperacute rejection| transplantation
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

10. A nurse is assessing a client for acute rejection of a kidney transplant. What assessment finding requires the most rapid communication with the provider?
a. Blood urea nitrogen (BUN) of 18 mg/dL
b. Cloudy, foul-smelling urine
c. Creatinine of 3.9 mg/dL
d. Urine output of 340 mL/8 hr

ANS: C
A creatinine of 3.9 mg/dL is high, indicating possible dysfunction of the kidney. This is a possible sign of rejection. The BUN is normal, as is the urine output. Cloudy, foul-smelling urine would probably indicate a urinary tract infection.

DIF: Analyzing/Analysis REF: 300
KEY: Immunity| inflammation| acute rejection| transplantation| nursing assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. The nurse working in an organ transplantation program knows that which individual is typically the best donor of an organ?

a. Child
b. Identical twin
c. Parent
d. Same-sex sibling

ANS: B
The recipients immune system recognizes donated tissues as non-self except in the case of an identical twin, whose genetic makeup is identical to the recipient.

DIF: Remembering/Knowledge REF: 300
KEY: Immunity| inflammation| transplantation| rejection
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. An older adult has a mild temperature, night sweats, and productive cough. The clients tuberculin test comes back negative. What action by the nurse is best?
a. Recommend a pneumonia vaccination.
b. Teach the client about viral infections.
c. Tell the client to rest and drink plenty of fluids.
d. Treat the client as if he or she has tuberculosis (TB).

ANS: D
Due to an age-related decrease in circulating T lymphocytes, the older adult may have a falsely negative TB test. With signs and symptoms of TB, the nurse treats the client as if he or she does have TB. A pneumonia vaccination is not warranted at this time. TB is not a viral infection. The client should rest and drink plenty of fluids, but this is not the best answer as it does not address the possibility that the clients TB test could be a false negative.

DIF: Applying/Application REF: 291
KEY: Respiratory system| respiratory disorder| laboratory values| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

13. A client receiving muromonab-CD3 (Orthoclone OKT3) asks the nurse how the drug works. What response by the nurse is best?
a. It increases the elimination of T lymphocytes from circulation.
b. It inhibits cytokine production in most lymphocytes.
c. It prevents DNA synthesis, stopping cell division in activated lymphocytes.
d. It prevents the activation of the lymphocytes responsible for rejection.

ANS: A
Muromonab-CD3 (Orthoclone OKT3) is a monoclonal antibody that works to increase the elimination of T lymphocytes from circulation. The corticosteroids broadly inhibit cytokine production in most leukocytes, resulting in generalized immunosuppression. The main action of all antiproliferatives (such as azathioprine [Imuran]) is to inhibit something essential to DNA synthesis, which prevents cell division in activated lymphocytes. Calcineurin inhibitors such as cyclosporine (Sandimmune) stop the production and secretion of interleukin-2, which then prevents the activation of lymphocytes involved in transplant rejection.

DIF: Understanding/Comprehension REF: 301
KEY: Immune system| immunity| immunosuppressants| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. For a person to be immunocompetent, which processes need to be functional and interact appropriately with each other? (Select all that apply.)
a. Antibody-mediated immunity
b. Cell-mediated immunity

c. Inflammation
d. Red blood cells
e. White blood cells

ANS: A, B, C
The three processes that need to be functional and interact with each other for a person to be immunocompetent are antibody-mediated immunity, cell-mediated immunity, and inflammation. Red and white blood cells are not processes.

DIF: Remembering/Knowledge REF: 291
KEY: Immunity| inflammation MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A student nurse is learning about the types of different cells involved in the inflammatory response. Which principles does the student learn? (Select all that apply.)
a. Basophils are only involved in the general inflammatory process.
b. Eosinophils increase during allergic reactions and parasitic invasion.
c. Macrophages can participate in many episodes of phagocytosis.
d. Monocytes turn into macrophages after they enter body tissues.
e. Neutrophils can only take part in one episode of phagocytosis.

ANS: B, C, D, E
Eosinophils do increase during allergic and parasitic invasion. Macrophages participate in many episodes of phagocytosis. Monocytes turn into macrophages after they enter body tissues. Neutrophils only take part in one episode of phagocytosis. Basophils are involved in both the general inflammatory response and allergic or hypersensitivity responses.

DIF: Remembering/Knowledge REF: 292
KEY: Inflammation| immunity MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. The nurse assesses clients for the cardinal signs of inflammation. Which signs/symptoms does this include? (Select all that apply.)
a. Edema
b. Pulselessness
c. Pallor
d. Redness
e. Warmth

ANS: A, D, E
The five cardinal signs of inflammation include redness, warmth, pain, swelling, and decreased function.

DIF: Remembering/Knowledge REF: 294
KEY: Inflammation| immunity| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. Which are steps in the process of making an antigen-specific antibody? (Select all that apply.)
a. Antibody-antigen binding
b. Invasion
c. Opsonization
d. Recognition
e. Sensitization

ANS: A, B, D, E
The seven steps in the process of making antigen-specific antibodies are: exposure/invasion, antigen recognition, sensitization, antibody production and release, antigen-antibody binding, antibody binding actions, and sustained immunity. Opsonization is the adherence of an antibody to the antigen, marking it for destruction.

DIF: Remembering/Knowledge REF: 297
KEY: Immunity| inflammation| antibody-mediated immunity
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. The student nurse is learning about the functions of different antibodies. Which principles does the student learn? (Select all that apply.)
a. IgA is found in high concentrations in secretions from mucous membranes.
b. IgD is present in the highest concentrations in mucous membranes.
c. IgE is associated with antibody-mediated hypersensitivity reactions.
d. IgG comprises the majority of the circulating antibody population.
e. IgM is the first antibody formed by a newly sensitized B cell.

ANS: A, C, D, E
Immunoglobulin A (IgA) is found in high concentrations in secretions from mucous membranes. Immunoglobulin E (IgE) is associated with antibody-mediated hypersensitivity reactions. The majority of the circulating antibody population consists of immunoglobulin G (IgG). The first antibody formed by a newly sensitized B cell is immunoglobulin M (IgM). Immunoglobulin D (IgD) is typically present in low concentrations.

DIF: Remembering/Knowledge REF: 298
KEY: Immunity| inflammation| antibodies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

SHORT ANSWER

1. A clients white blood cell count is 7500/mm3. Calculate the expected range for this clients neutrophils. (Record your answer using whole numbers separated with a hyphen; do not use commas.) _____/mm3

ANS:
4125-5625/mm3
The normal range for neutrophils is 55% to 75% of the white blood cell count.
7500 0.55 = 4125
7500 0.75 = 5625
So the range would be expected to be 4125/mm3 to 5625/mm3.

DIF: Applying/Application REF: 292
KEY: Inflammation| immunity| white blood cell count| neutrophils
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 18: Care of Patients with Arthritis and Other Connective Tissue Diseases

MULTIPLE CHOICE

1. A nurse is working with a community group promoting healthy aging. What recommendation is best to help prevent osteoarthritis (OA)?
a. Avoid contact sports.
b. Get plenty of calcium.
c. Lose weight if needed.
d. Engage in weight-bearing exercise.

ANS: C
Obesity can lead to OA, and if the client is overweight, losing weight can help prevent OA or reduce symptoms once it occurs. Arthritis can be caused by contact sports, but this is less common than obesity. Calcium and weight-bearing exercise are both important for osteoporosis.

DIF: Understanding/Comprehension REF: 308
KEY: Client teaching| health promotion| osteoarthritis| weight loss
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A nurse in the family clinic is teaching a client newly diagnosed with osteoarthritis (OA) about drugs used to treat the disease. For which medication does the nurse plan primary teaching?
a. Acetaminophen (Tylenol)
b. Cyclobenzaprine hydrochloride (Flexeril)
c. Hyaluronate (Hyalgan)
d. Ibuprofen (Motrin)

ANS: A
All of the drugs are appropriate to treat OA. However, the first-line drug is acetaminophen. Cyclobenzaprine is a muscle relaxant given to treat muscle spasms. Hyaluronate is a synthetic joint fluid implant. Ibuprofen is a nonsteroidal anti-inflammatory drug.

DIF: Remembering/Knowledge REF: 307
KEY: Osteoarthritis| acetaminophen| pharmacologic pain management| patient teaching
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. The clinic nurse assesses a client with diabetes during a checkup. The client also has osteoarthritis (OA). The nurse notes the clients blood glucose readings have been elevated. What question by the nurse is most appropriate?
a. Are you compliant with following the diabetic diet?
b. Have you been taking glucosamine supplements?
c. How much exercise do you really get each week?
d. Youre still taking your diabetic medication, right?

ANS: B
All of the topics are appropriate for a client whose blood glucose readings have been higher than usual. However, since this client also has OA, and glucosamine can increase blood glucose levels, the nurse should ask about its use. The other questions all have an element of nontherapeutic communication in them. Compliant is a word associated with negative images, and the client may deny being noncompliant. Asking how much exercise the client really gets is accusatory. Asking if the client takes his or her medications right? is patronizing.

DIF: Applying/Application REF: 309
KEY: Osteoarthritis| nursing assessment| supplements
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. The nurse working in the orthopedic clinic knows that a client with which factor has an absolute contraindication for having a total joint replacement?
a. Needs multiple dental fillings
b. Over age 85
c. Severe osteoporosis
d. Urinary tract infection

ANS: C
Osteoporosis is a contraindication to joint replacement because the bones have a high risk of shattering as the new prosthesis is implanted. The client who needs fillings should have them done prior to the surgery. Age greater than 85 is not an absolute contraindication. A urinary tract infection can be treated prior to surgery.

DIF: Remembering/Knowledge REF: 309
KEY: Osteoarthritis| osteoporosis| joint replacement| surgical procedures
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. An older client has returned to the surgical unit after a total hip replacement. The client is confused and restless. What intervention by the nurse is most important to prevent injury?
a. Administer mild sedation.
b. Keep all four siderails up.
c. Restrain the clients hands.
d. Use an abduction pillow.

ANS: D
Older clients often have trouble metabolizing anesthetics and pain medication, leading to confusion or restlessness postoperatively. To prevent the hip from dislocating, the nurse should use an abduction pillow since the client cannot follow directions at this time. Sedation may worsen the clients mental status and should be avoided. Using all four siderails may be considered a restraint. Hand restraints are not necessary in this situation.

DIF: Applying/Application REF: 311
KEY: Joint replacement| abduction pillow| musculoskeletal system| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. What action by the perioperative nursing staff is most important to prevent surgical wound infection in a client having a total joint replacement?
a. Administer preoperative antibiotic as ordered.
b. Assess the clients white blood cell count.
c. Instruct the client to shower the night before.
d. Monitor the clients temperature postoperatively.

ANS: A
To prevent surgical wound infection, antibiotics are given preoperatively within an hour of surgery. Simply taking a shower will not help prevent infection unless the client is told to use special antimicrobial soap. The other options are processes to monitor for infection, not prevent it.

DIF: Applying/Application REF: 310
KEY: Joint replacement| Surgical Care Improvement Project (SCIP)| wound infection| antibiotics MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. The nurse on the postoperative inpatient unit assesses a client after a total hip replacement. The clients surgical leg is visibly shorter than the other one and the client reports extreme pain. While a co-worker calls the surgeon, what action by the nurse is best?
a. Assess neurovascular status in both legs.

b. Elevate the affected leg and apply ice.
c. Prepare to administer pain medication.
d. Try to place the affected leg in abduction.

ANS: A
This client has manifestations of hip dislocation, a critical complication of this surgery. Hip dislocation can cause neurovascular compromise. The nurse should assess neurovascular status, comparing both legs. The nurse should not try to move the extremity to elevate or abduct it. Pain medication may be administered if possible, but first the nurse should thoroughly assess the client.

DIF: Applying/Application REF: 311
KEY: Nursing assessment| joint replacement| musculoskeletal system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A client has a continuous passive motion (CPM) device after a total knee replacement. What action does the nurse delegate to the unlicensed assistive personnel (UAP) after the affected leg is placed in the machine while the client is in bed?
a. Assess the distal circulation in 30 minutes.
b. Change the settings based on range of motion.
c. Raise the lower siderail on the affected side.
d. Remind the client to do quad-setting exercises.

ANS: C
Because the clients leg is strapped into the CPM, if it falls off the bed due to movement, the clients leg (and new joint) can be injured. The nurse should instruct the UAP to raise the siderail to prevent this from occurring. Assessment is a nursing responsibility. Only the surgeon, physical therapist, or specially trained technician adjusts the CPM settings. Quad-setting exercises are not related to the CPM machine.

DIF: Applying/Application REF: 315
KEY: Joint replacement| delegation| continuous passive motion machine| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. After a total knee replacement, a client is on the postoperative nursing unit with a continuous femoral nerve blockade. On assessment, the nurse notes the clients pulses are 2+/4+ bilaterally; the skin is pale pink, warm, and dry; and the client is unable to dorsiflex or plantarflex the affected foot. What action does the nurse perform next?
a. Document the findings and monitor as prescribed.
b. Increase the frequency of monitoring the client.
c. Notify the surgeon or anesthesia provider immediately.
d. Palpate the clients bladder or perform a bladder scan.

ANS: C
With the femoral nerve block, the client should still be able to dorsiflex and plantarflex the affected foot. Since this client has an abnormal finding, the nurse should notify either the surgeon or the anesthesia provider immediately. Documentation is the last priority. Increasing the frequency of assessment may be a good idea, but first the nurse must notify the appropriate person. Palpating the bladder is not related.

DIF: Applying/Application REF: 316
KEY: Postoperative nursing| joint replacement| nursing assessment| musculoskeletal system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A nurse is discharging a client to a short-term rehabilitation center after a joint replacement. Which action by the nurse is most important?
a. Administering pain medication before transport
b. Answering any last-minute questions by the client
c. Ensuring the family has directions to the facility

d. Providing a verbal hand-off report to the facility

ANS: D
As required by The Joint Commission and other accrediting agencies, a hand-off report must be given to the new provider to prevent error. The other options are valid responses but do not take priority.

DIF: Applying/Application REF: 318
KEY: Hand-off communication| communication| The Joint Commission
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. A nurse works in the rheumatology clinic and sees clients with rheumatoid arthritis (RA). Which client should the nurse see first?
a. Client who reports jaw pain when eating
b. Client with a red, hot, swollen right wrist
c. Client who has a puffy-looking area behind the knee
d. Client with a worse joint deformity since the last visit

ANS: B
All of the options are possible manifestations of RA. However, the presence of one joint that is much redder, hotter, or more swollen that the other joints may indicate infection. The nurse needs to see this client first.

DIF: Applying/Application REF: 319
KEY: Rheumatoid arthritis| nursing assessment| autoimmune disorder
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12. A client with rheumatoid arthritis (RA) is on the postoperative nursing unit after having elective surgery. The client reports that one arm feels like pins and needles and that the neck is very painful since returning from surgery. What action by the nurse is best?
a. Assist the client to change positions.
b. Document the findings in the clients chart.
c. Encourage range of motion of the neck.
d. Notify the provider immediately.

ANS: D
Clients with RA can have cervical joint involvement. This can lead to an emergent situation in which the phrenic nerve is compressed, causing respiratory insufficiency. The client can also suffer a permanent spinal cord injury. The nurse needs to notify the provider immediately. Changing positions and doing range of motion may actually worsen the situation. The nurse should document findings after notifying the provider.

DIF: Applying/Application REF: 320
KEY: Rheumatoid arthritis| autoimmune disorder| musculoskeletal system| communication| critical rescue
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. The nurse working in the rheumatology clinic is seeing clients with rheumatoid arthritis (RA). What assessment would be most important for the client whose chart contains the diagnosis of Sjgrens syndrome?
a. Abdominal assessment
b. Oxygen saturation
c. Renal function studies
d. Visual acuity

ANS: D
Sjgrens syndrome is seen in clients with RA and manifests with dryness of the eyes, mouth, and vagina in females. Visual disturbances can occur. The other assessments are not related to RA and Sjgrens syndrome.

DIF: Applying/Application REF: 320
KEY: Rheumatoid arthritis| nursing assessment| musculoskeletal system| visual disturbances| autoimmune

disorder| sensory system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. The nurse is working with a client who has rheumatoid arthritis (RA). The nurse has identified the priority problem of poor body image for the client. What finding by the nurse indicates goals for this client problem are being met?
a. Attends meetings of a book club
b. Has a positive outlook on life
c. Takes medication as directed
d. Uses assistive devices to protect joints

ANS: A
All of the activities are appropriate for a client with RA. Clients who have a poor body image are often reluctant to appear in public, so attending public book club meetings indicates that goals for this client problem are being met.

DIF: Evaluating/Synthesis REF: 326
KEY: Rheumatoid arthritis| autoimmune disorder| coping| psychosocial response
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Psychosocial Integrity

15. A client is started on etanercept (Enbrel). What teaching by the nurse is most appropriate?
a. Giving subcutaneous injections
b. Having a chest x-ray once a year
c. Taking the medication with food
d. Using heat on the injection site

ANS: A
Etanercept is given as a subcutaneous injection twice a week. The nurse should teach the client how to self-administer the medication. The other options are not appropriate for etanercept.

DIF: Understanding/Comprehension REF: 324
KEY: Rheumatoid arthritis| autoimmune disease| biologic response modifiers| client education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

16. The nurse in the rheumatology clinic is assessing clients with rheumatoid arthritis (RA). Which client should the nurse see first?
a. Client taking celecoxib (Celebrex) and ranitidine (Zantac)
b. Client taking etanercept (Enbrel) with a red injection site
c. Client with a blood glucose of 190 mg/dL who is taking steroids
d. Client with a fever and cough who is taking tofacitinib (Xeljanz)

ANS: D
Tofacitinib carries a Food and Drug Administration black box warning about opportunistic infections, tuberculosis, and cancer. Fever and cough may indicate tuberculosis. Ranitidine is often taken with celecoxib, which can cause gastrointestinal distress. Redness and itchy rashes are frequently seen with etanercept injections. Steroids are known to raise blood glucose levels.

DIF: Applying/Application REF: 325
KEY: Rheumatoid arthritis| autoimmune disorders| nursing assessment| biologic response modifiers MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17. A client with rheumatoid arthritis (RA) has an acutely swollen, red, and painful joint. What nonpharmacologic treatment does the nurse apply?
a. Heating pad
b. Ice packs

c. Splints
d. Wax dip

ANS: B
Ice is best for acute inflammation. Heat often helps with joint stiffness. Splinting helps preserve joint function. A wax dip is used to provide warmth to the joint which is more appropriate for chronic pain and stiffness.

DIF: Remembering/Knowledge REF: 325
KEY: Rheumatoid arthritis| autoimmune disorders| ice| pain
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

18. The nurse on an inpatient rheumatology unit receives a hand-off report on a client with an acute exacerbation of systemic lupus erythematosus (SLE). Which reported laboratory value requires the nurse to assess the client further?
a. Creatinine: 3.9 mg/dL
b. Platelet count: 210,000/mm3
c. Red blood cell count: 5.2/mm3
d. White blood cell count: 4400/mm3

ANS: A
Lupus nephritis is the leading cause of death in clients with SLE. The creatinine level is very high and the nurse needs to perform further assessments related to this finding. The other laboratory values are normal.

DIF: Applying/Application REF: 328
KEY: Systemic lupus erythematosus| autoimmune disease| renal system
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

19. A client who has had systemic lupus erythematosus (SLE) for many years is in the clinic reporting hip pain with ambulation. Which action by the nurse is best?
a. Assess medication records for steroid use.
b. Facilitate a consultation with physical therapy.
c. Measure the range of motion in both hips.
d. Notify the health care provider immediately.

ANS: A
Chronic steroid use is seen in clients with SLE and can lead to osteonecrosis (bone necrosis). The nurse should determine if the client has been taking a steroid. Physical therapy may be beneficial, but there is not enough information about the client yet. Measuring range of motion is best done by the physical therapist. Notifying the provider immediately is not warranted.

DIF: Applying/Application REF: 329
KEY: Systemic lupus erythematosus| autoimmune disorders| nursing assessment| pain| steroids MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

20. A client with systemic lupus erythematosus (SLE) was recently discharged from the hospital after an acute exacerbation. The client is in the clinic for a follow-up visit and is distraught about the possibility of another hospitalization disrupting the family. What action by the nurse is best?
a. Explain to the client that SLE is an unpredictable disease.
b. Help the client create backup plans to minimize disruption.
c. Offer to talk to the family and educate them about SLE.
d. Tell the client to remain compliant with treatment plans.

ANS: B
SLE is an unpredictable disease and acute exacerbations can occur without warning, creating chaos in the family. Helping the client make backup plans for this event not only will decrease the disruption but will give the client a sense of having more control. Explaining facts about the disease is helpful as well but does not

engage the client in problem solving. The family may need education, but again this does not help the client to problem-solve. Remaining compliant may help decrease exacerbations, but is not as powerful an intervention as helping the client plan for such events.

DIF: Applying/Application REF: 330
KEY: Systemic lupus erythematosus| autoimmune disorders| coping| psychosocial response
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

21. A nurse is caring for a client with systemic sclerosis. The clients facial skin is very taut, limiting the clients ability to open the mouth. After consulting with a registered dietitian for appropriate nutrition, what other consultation should the nurse facilitate?
a. Dentist
b. Massage therapist
c. Occupational therapy
d. Physical therapy

ANS: A
With limited ability to open the mouth, dental hygiene may be lacking. The nurse should encourage the client to see a dentist. The other referrals are not related to the mouth.

DIF: Applying/Application REF: 331
KEY: Systemic sclerosis| autoimmune disorder| oral care| collaboration
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

22. The nurse is teaching a client with gout dietary strategies to prevent exacerbations or other problems. Which statement by the nurse is most appropriate?
a. Drink 1 to 2 liters of water each day.
b. Have 10 to 12 ounces of juice a day.
c. Liver is a good source of iron.
d. Never eat hard cheeses or sardines.

ANS: A
Kidney stones are common in clients with gout, so drinking plenty of water will help prevent this from occurring. Citrus juice is high in ash, which can help prevent the formation of stones, but the value of this recommendation is not clear. Clients with gout should not eat organ meats or fish with bones, such as sardines.

DIF: Understanding/Comprehension REF: 334
KEY: Gout| musculoskeletal system| patient education| nutrition
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

23. A nurse is teaching a client with psoriatic arthritis about the medication golimumab (Simponi). What information is most important to include?
a. Avoid large crowds or people who are ill.
b. Stay upright for 1 hour after taking this drug.
c. This drug may cause your hair to fall out.
d. You may double the dose if pain is severe.

ANS: A
This drug has a Food and Drug Administration black box warning about opportunistic or other serious infections. Teach the client to avoid large crowds and people who are ill. The other instructions do not pertain to golimumab.

DIF: Applying/Application REF: 335
KEY: Psoriatic arthritis| autoimmune disorders| patient education| biologic response modifiers MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

24. A client in the orthopedic clinic has a self-reported history of osteoarthritis. The client reports a low-grade fever that started when the weather changed and several joints started acting up, especially both hips and knees What action by the nurse is best?
a. Assess the client for the presence of subcutaneous nodules or Bakers cysts.
b. Inspect the clients feet and hands for podagra and tophi on fingers and toes.
c. Prepare to teach the client about an acetaminophen (Tylenol) regimen.
d. Reassure the client that the problems will fade as the weather changes again.

ANS: A
Osteoarthritis is not a systemic disease, nor does it present bilaterally. These are manifestations of rheumatoid arthritis. The nurse should assess for other manifestations of this disorder, including subcutaneous nodules and Bakers cysts. Podagra and tophi are seen in gout. Acetaminophen is not used for rheumatoid arthritis. Telling the client that the symptoms will fade with weather changes is not accurate.

DIF: Applying/Application REF: 320
KEY: Rheumatoid arthritis| autoimmune disorders| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

25. A nurse is caring for a client after joint replacement surgery. What action by the nurse is most important to prevent wound infection?
a. Assess the clients white blood cell count.
b. Culture any drainage from the wound.
c. Monitor the clients temperature every 4 hours.
d. Use aseptic technique for dressing changes.

ANS: D
Preventing surgical wound infection is a primary responsibility of the nurse, who must use aseptic technique to change dressings or empty drains. The other actions do not prevent infection but can lead to early detection of an infection that is already present.

DIF: Applying/Application REF: 311
KEY: Joint replacement| infection control| wound infection| dressings
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

26. A nurse is discharging a client after a total hip replacement. What statement by the client indicates good potential for self-management?
a. I can bend down to pick something up.
b. I no longer need to do my exercises.
c. I will not sit with my legs crossed.
d. I wont wash my incision to keep it dry.

ANS: C
There are many precautions clients need to take after hip replacement surgery, including not bending more than 90 degrees at the hips, continuing prescribed exercises, not crossing the legs, and washing the incision daily and patting it dry.

DIF: Evaluating/Synthesis REF: 312
KEY: Joint replacement| discharge planning/teaching| nursing evaluation
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

27. The nurse is caring for a client using a continuous passive motion (CPM) machine and has delegated some tasks to the unlicensed assistive personnel (UAP). What action by the UAP warrants intervention by the nurse?
a. Checking to see if the machine is working
b. Keeping controls in a secure place on the bed
c. Placing padding in the machine per request
d. Storing the CPM machine under the bed after removal

ANS: D
For infection control (and to avoid tripping on it), the CPM machine is never placed on the floor. The other actions are appropriate.

DIF: Applying/Application REF: 316
KEY: Joint replacement| continuous passive motion machine| infection control| delegation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

28. A client recently diagnosed with systemic lupus erythematosus (SLE) is in the clinic for a follow-up visit. The nurse evaluates that the client practices good self-care when the client makes which statement?
a. I always wear long sleeves, pants, and a hat when outdoors.
b. I try not to use cosmetics that contain any type of sunblock.
c. Since I tend to sweat a lot, I use a lot of baby powder.
d. Since I cant be exposed to the sun, I have been using a tanning bed.

ANS: A
Good self-management of the skin in SLE includes protecting the skin from sun exposure, using sunblock, avoiding drying agents such as powder, and avoiding tanning beds.

DIF: Evaluating/Synthesis REF: 330
KEY: Systemic lupus erythematosus| nursing evaluation| self-care| patient teaching| integumentary system
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

29. A client is scheduled to have a hip replacement. Preoperatively, the client is found to be mildly anemic and the surgeon states the client may need a blood transfusion during or after the surgery. What action by the preoperative nurse is most important?
a. Administer preoperative medications as prescribed.
b. Ensure that a consent for transfusion is on the chart.
c. Explain to the client how anemia affects healing.
d. Teach the client about foods high in protein and iron.

ANS: B
The preoperative nurse should ensure that all valid consents are on the chart, including one for blood transfusions if this may be needed. Administering preoperative medications is important for all preoperative clients and is not specific to this client. Teaching in the preoperative area should focus on immediate concerns.

DIF: Applying/Application REF: 310
KEY: Joint replacement| informed consent| blood transfusions| preoperative nursing
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

30. An older client is scheduled to have hip replacement in 2 months and has the following laboratory values: white blood cell count: 8900/mm3, red blood cell count: 3.2/mm3, hemoglobin: 9 g/dL, hematocrit: 32%. What intervention by the nurse is most appropriate?
a. Instruct the client to avoid large crowds.
b. Prepare to administer epoetin alfa (Epogen).
c. Teach the client about foods high in iron.
d. Tell the client that all laboratory results are normal.

ANS: B
This client is anemic, which needs correction prior to surgery. While eating iron-rich foods is helpful, to increase the clients red blood cells, hemoglobin, and hematocrit within 2 months, epoetin alfa is needed. This colony-stimulating factor will encourage the production of red cells. The clients white blood cell count is normal, so avoiding infection is not the priority.

DIF: Applying/Application REF: 310

KEY: Joint replacement| anemia| colony-stimulating factors| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

31. A client is getting out of bed into the chair for the first time after an uncemented hip replacement. What action by the nurse is most important?
a. Have adequate help to transfer the client.
b. Provide socks so the client can slide easier.
c. Tell the client full weight bearing is allowed.
d. Use a footstool to elevate the clients leg.

ANS: A
The client with an uncemented hip will be on toe-touch only right after surgery. The nurse should ensure there is adequate help to transfer the client while preventing falls. Slippery socks will encourage a fall. Elevating the leg greater than 90 degrees is not allowed.

DIF: Applying/Application REF: 313
KEY: Joint replacement| safety| falls| musculoskeletal system
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

32. A client has fibromyalgia and is prescribed duloxetine hydrochloride (Cymbalta). The client calls the clinic and asks the nurse why an antidepressant drug has been prescribed. What response by the nurse is best?
a. A little sedation will help you get some rest.
b. Depression often accompanies fibromyalgia.
c. This drug works in the brain to decrease pain.
d. You will have more energy after taking this drug.

ANS: C
Duloxetine works to increase the release of the neurotransmitters serotonin and norepinephrine, which reduces the pain from fibromyalgia. The other answers are inaccurate.

DIF: Understanding/Comprehension REF: 336
KEY: Fibromyalgia| antidepressants| pain| pharmacologic pain management
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

33. A client has been diagnosed with rheumatoid arthritis. The client has experienced increased fatigue and worsening physical status and is finding it difficult to maintain the role of elder in his cultural community. The elder is expected to attend social events and make community decisions. Stress seems to exacerbate the condition. What action by the nurse is best?
a. Assess the clients culture more thoroughly.
b. Discuss options for performing duties.
c. See if the client will call a community meeting.
d. Suggest the client give up the role of elder.

ANS: A
The nurse needs a more thorough understanding of the clients culture, including the meaning of illness and the ramifications of the elder not being able to perform traditional duties. This must be done prior to offering any possible solutions. If the nurse does not understand the consequences of what is suggested, the client may simply be unwilling to listen or participate in problem solving. The other options may be reasonable depending on the outcome of a better cultural understanding.

DIF: Applying/Application REF: 327
KEY: Rheumatoid arthritis| autoimmune disorders| coping| culture| patient-centered care| diversity MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

34. A client has rheumatoid arthritis that especially affects the hands. The client wants to finish quilting a baby

blanket before the birth of her grandchild. What response by the nurse is best?
a. Lets ask the provider about increasing your pain pills.
b. Hold ice bags against your hands before quilting.
c. Try a paraffin wax dip 20 minutes before you quilt.
d. You need to stop quilting before it destroys your fingers.

ANS: C
Paraffin wax dips are beneficial for decreasing pain in arthritic hands and lead to increased mobility. The nurse can suggest this comfort measure. Increasing pain pills will not help with movement. Ice has limited use unless the client has a hot or exacerbated joint. The client wants to finish her project, so the nurse should not negate its importance by telling the client it is destroying her joints.

DIF: Applying/Application REF: 325
KEY: Rheumatoid arthritis| autoimmune disorders| nonpharmacologic pain management| heat MSC: Integrated Process: Caring
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

35. A client has newly diagnosed systemic lupus erythematosus (SLE). What instruction by the nurse is most important?
a. Be sure you get enough sleep at night.
b. Eat plenty of high-protein, high-iron foods.
c. Notify your provider at once if you get a fever.
d. Weigh yourself every day on the same scale.

ANS: C
Fever is the classic sign of a lupus flare and should be reported immediately. Rest and nutrition are important but do not take priority over teaching the client what to do if he or she develops an elevated temperature. Daily weights may or may not be important depending on renal involvement.

DIF: Understanding/Comprehension REF: 329
KEY: Systemic lupus erythematosus| autoimmune disorders| patient education| self-care| fever MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

36. A client comes to the family medicine clinic and reports joint pain and stiffness. The nurse is asked to assess the client for Heberdens nodules. What assessment technique is correct?
a. Inspect the clients distal finger joints.
b. Palpate the clients abdomen for tenderness.
c. Palpate the clients upper body lymph nodes.
d. Perform range of motion on the clients wrists.

ANS: A
Herberdens nodules are seen in osteoarthritis and are bony nodules at the distal interphalangeal joints. To assess for this finding, the nurse inspects the clients distal fingertips. These nodules are not found in the abdomen, lymph nodes, or wrists.

DIF: Applying/Application REF: 306
KEY: Musculoskeletal system| musculoskeletal assessment| nursing assessment| osteoarthritis MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

37. A client takes celecoxib (Celebrex) for chronic osteoarthritis in multiple joints. After a knee replacement, the health care provider has prescribed morphine sulfate for postoperative pain relief. The client also requests the celecoxib in addition to the morphine. What action by the nurse is best?
a. Consult with the health care provider about administering both drugs to the client.
b. Inform the client that the celecoxib will be started when he or she goes home.
c. Teach the client that, since morphine is stronger, celecoxib is not needed.
d. Tell the client he or she should not take both drugs at the same time.

ANS: A
Despite getting an opioid analgesic for postoperative pain, the nurse should be aware that the client may be on other medications for arthritis in other joints. The nonsteroidal anti-inflammatory drug celecoxib will also help with the postoperative pain. The nurse should consult the provider about continuing the celecoxib while the client is in the hospital. The other responses are not warranted, as the client should be restarted on this medication postoperatively.

DIF: Applying/Application REF: 307
KEY: Postoperative nursing| nonsteroidal anti-inflammatory drugs (NSAIDs)| musculoskeletal disorders
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. The nursing student studying rheumatoid arthritis (RA) learns which facts about the disease? (Select all that apply.)
a. It affects single joints only.
b. Antibodies lead to inflammation.
c. It consists of an autoimmune process.
d. Morning stiffness is rare.
e. Permanent damage is inevitable.

ANS: B, C
RA is a chronic autoimmune systemic inflammatory disorder leading to arthritis-type symptoms in the joints and other symptoms that can be seen outside the joints. Antibodies are created that lead to inflammation. Clients often report morning stiffness. Permanent damage can be avoided with aggressive, early treatment.

DIF: Remembering/Knowledge REF: 318
KEY: Rheumatoid arthritis| musculoskeletal system| autoimmune disorder
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is teaching a female client with rheumatoid arthritis (RA) about taking methotrexate (MTX) (Rheumatrex) for disease control. What information does the nurse include? (Select all that apply.)
a. Avoid acetaminophen in over-the-counter medications.
b. It may take several weeks to become effective on pain.
c. Pregnancy and breast-feeding are not affected by MTX.
d. Stay away from large crowds and people who are ill.
e. You may find that folic acid, a B vitamin, reduces side effects.

ANS: A, B, D, E
MTX is a disease-modifying antirheumatic drug and is used as a first-line drug for RA. MTX can cause liver toxicity, so the client should be advised to avoid medications that contain acetaminophen. It may take 4 to 6 weeks for effectiveness. MTX can cause immunosuppression, so avoiding sick people and crowds is important. Folic acid helps reduce side effects for some people. Pregnancy and breast-feeding are contraindicated while on this drug.

DIF: Applying/Application REF: 322
KEY: Rheumatoid arthritis| autoimmune disease| patient education| disease-modifying antirheumatic drugs (DMARDs)| acetaminophen
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A client has been diagnosed with fibromyalgia syndrome but does not want to take the prescribed medications. What nonpharmacologic measures can the nurse suggest to help manage this condition? (Select all that apply.)
a. Acupuncture
b. Stretching
c. Supplements

d. Tai chi
e. Vigorous aerobics

ANS: A, B, D
There are many nonpharmacologic means for controlling the symptoms of fibromyalgia, including acupuncture, stretching, tai chi, low-impact aerobics, swimming, biking, strengthening, massage, stress management, and hypnosis. Dietary supplements and vigorous aerobics are not recommended.

DIF: Remembering/Knowledge REF: 336
KEY: Fibromyalgia| patient education| physical modalities| nonpharmacologic pain management| complementary and alternative therapies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. The nurse working in the rheumatology clinic assesses clients with rheumatoid arthritis (RA) for late manifestations. Which signs/symptoms are considered late manifestations of RA? (Select all that apply.)
a. Anorexia
b. Feltys syndrome
c. Joint deformity
d. Low-grade fever
e. Weight loss

ANS: B, C, E
Late manifestations of RA include Feltys syndrome, joint deformity, weight loss, organ involvement, osteoporosis, extreme fatigue, and anemia, among others. Anorexia and low-grade fever are both seen early in the course of the disease.

DIF: Remembering/Knowledge REF: 319
KEY: Rheumatoid arthritis| nursing assessment| musculoskeletal system| autoimmune disorders MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. An older client returning to the postoperative nursing unit after a hip replacement is disoriented and restless. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Apply an abduction pillow to the clients legs.
b. Assess the skin under the abduction pillow straps.
c. Place pillows under the heels to keep them off the bed.
d. Monitor cognition to determine when the client can get up.
e. Take and record vital signs per unit/facility policy.

ANS: A, C, E
The UAP can apply an abduction pillow, elevate the heels on a pillow, and take/record vital signs. Assessing skin is the nurses responsibility, although if the UAP notices abnormalities, he or she should report them. Determining when the client is able to get out of bed is also a nursing responsibility.

DIF: Applying/Application REF: 311
KEY: Joint replacement| delegation| abduction pillow| unlicensed assistive personnel (UAP)| nursing assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. The nurse is working with clients who have connective tissue diseases. Which disorders are correctly paired with their manifestations? (Select all that apply.)
a. Dry, scaly skin rash Systemic lupus erythematosus (SLE)
b. Esophageal dysmotility Systemic sclerosis
c. Excess uric acid excretion Gout
d. Footdrop and paresthesias Osteoarthritis
e. Vasculitis causing organ damage Rheumatoid arthritis

ANS: A, B, E
A dry, scaly skin rash is the most frequent dermatologic manifestation of SLE. Systemic sclerosis can lead to esophageal motility problems. Vasculitis leads to organ damage in rheumatoid arthritis. Gout is caused by hyperuricemia; the production of uric acid exceeds the excretion capability of the kidneys. Footdrop and paresthesias occur in rheumatoid arthritis.

DIF: Remembering/Knowledge REF: 319
KEY: Autoimmune disorders
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse works with several clients who have gout. Which types of gout and their drug treatments are correctly matched? (Select all that apply.)
a. Allopurinol (Zyloprim) Acute gout
b. Colchicine (Colcrys) Acute gout
c. Febuxostat (Uloric) Chronic gout
d. Indomethacin (Indocin) Acute gout
e. Probenecid (Benemid) Chronic gout

ANS: B, C, D, E
Acute gout can be treated with colchicine and indomethacin. Chronic gout can be treated with febuxostat and probenecid. Allopurinol is used for chronic gout.

DIF: Remembering/Knowledge REF: 334
KEY: Gout| pain| pharmacologic pain management
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. The nurse is caring for a client with systemic sclerosis (SSc). What comfort measures can the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Collaborate with a registered dietitian for appropriate foods.
b. Inspect the skin and note any areas of ulceration.
c. Keep the room at a comfortably warm temperature.
d. Place a foot cradle at the end of the bed to lift sheets.
e. Remind the client to elevate the head of the bed after eating.

ANS: C, D, E
The client with SSc should avoid cold temperatures, which may lead to vasospasms and Raynauds phenomenon. The UAP can adjust the room temperature for the clients comfort. Keeping the sheets off the feet will help prevent injury; the UAP can apply a foot cradle to the bed to hold the sheets up. Because of esophageal problems, the client should remain in an upright position for 1 to 2 hours after meals. The UAP can remind the client of this once he or she has been taught. The other actions are performed by the registered nurse.

DIF: Applying/Application REF: 329
KEY: Systemic scleroderma| autoimmune disorders| delegation| nonpharmacologic pain management MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A client has rheumatoid arthritis (RA) and the visiting nurse is conducting a home assessment. What options can the nurse suggest for the client to maintain independence in activities of daily living (ADLs)? (Select all that apply.)
a. Grab bars to reach high items
b. Long-handled bath scrub brush
c. Soft rocker-recliner chair
d. Toothbrush with built-up handle
e. Wheelchair cushion for comfort

ANS: A, B, D

Grab bars, long-handled bath brushes, and toothbrushes with built-up handles all provide modifications for daily activities, making it easier for the client with RA to complete ADLs independently. The rocker-recliner and wheelchair cushion are comfort measures but do not help increase independence.

DIF: Applying/Application REF: 325
KEY: Rheumatoid arthritis| autoimmune disorders| activities of daily living| musculoskeletal system| functional ability MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

10. A home health care nurse is visiting a client discharged home after a hip replacement. The client is still on partial weight bearing and using a walker. What safety precautions can the nurse recommend to the client? (Select all that apply.)
a. Buy and install an elevated toilet seat.
b. Install grab bars in the shower and by the toilet.
c. Step into the bathtub with the affected leg first.
d. Remove all throw rugs throughout the house.
e. Use a shower chair while taking a shower.

ANS: A, B, D, E
Buying and installing an elevated toilet seat, installing grab bars, removing throw rugs, and using a shower chair will all promote safety for this client. The client is still on partial weight bearing, so he or she cannot step into the bathtub leading with the operative side. Stepping into a bathtub may also require the client to bend the hip more than the allowed 90 degrees.

DIF: Applying/Application REF: 315
KEY: Joint replacement| osteoarthritis| home safety| assistive devices
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A client with fibromyalgia is in the hospital for an unrelated issue. The client reports that sleep, which is always difficult, is even harder now. What actions by the nurse are most appropriate? (Select all that apply.)
a. Allow the client uninterrupted rest time.
b. Assess the clients usual bedtime routine.
c. Limit environmental noise as much as possible.
d. Offer a massage or warm shower at night.
e. Request an order for a strong sleeping pill.

ANS: A, B, C, D
Clients with fibromyalgia often have sleep disturbances, which can be exacerbated by the stress, noise, and unfamiliar environment of the hospital. Allowing uninterrupted rest time, adhering to the clients usual bedtime routine as much as possible, limiting noise and light, and offering massages or warm showers can help. The client does not need a strong sleeping pill unless all other options fail and the client requests something for sleep. At that point a mild sleeping agent can be tried.

DIF: Applying/Application REF: 336
KEY: Fibromyalgia| rest and sleep| patient-centered care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

12. A client has a possible connective tissue disease and the nurse is reviewing the clients laboratory values. Which laboratory values and their related connective tissue diseases (CTDs) are correctly matched? (Select all that apply.)
a. Elevated antinuclear antibody (ANA) Normal value; no connective tissue disease
b. Elevated sedimentation rate Rheumatoid arthritis
c. Lowered albumin Indicative only of nutritional deficit
d. Positive human leukocyte antigen B27 (HLA-B27) Reiters syndrome or ankylosing spondylitis
e. Positive rheumatoid factor Possible kidney disease

ANS: D, E

The HLA-B27 is diagnostic for Reiters syndrome or ankylosing spondylitis. A positive rheumatoid factor can be seen in autoimmune CTDs, kidney and liver disease, or leukemia. An elevated ANA is indicative of inflammatory CTDs, although a small minority of healthy adults also have this finding. An elevated sedimentation rate indicates inflammation, whether from an infection, an injury, or an autoimmune CTD. Lowered albumin is seen in nutritional deficiencies but also in chronic infection or inflammation.

DIF: Remembering/Knowledge REF: 321

Chapter 19: Care of Patients with HIV Disease

MULTIPLE CHOICE

1. The nurse is caring for a client diagnosed with human immune deficiency virus. The clients CD4+ cell count is 399/mm3. What action by the nurse is best?
a. Counsel the client on safer sex practices/abstinence.
b. Encourage the client to abstain from alcohol.
c. Facilitate genetic testing for CD4+ CCR5/CXCR4 co-receptors.
d. Help the client plan high-protein/iron meals.

ANS: A
This client is in the Centers for Disease Control and Prevention stage 2 case definition group. He or she remains highly infectious and should be counseled on either safer sex practices or abstinence. Abstaining from alcohol is healthy but not required. Genetic testing is not commonly done, but an alteration on the CCR5/CXCR4 co-receptors is seen in long-term nonprogressors. High-protein/iron meals are important for people who are immunosuppressed, but helping to plan them does not take priority over stopping the spread of the disease.

DIF: Applying/Application REF: 339
KEY: HIV/AIDS| safer sex| immune disorders
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. The nurse is presenting information to a community group on safer sex practices. The nurse should teach that which sexual practice is the riskiest?
a. Anal intercourse
b. Masturbation
c. Oral sex
d. Vaginal intercourse

ANS: A
Anal intercourse is the riskiest sexual practice because the fragile anal tissue can tear, creating a portal of entry for human immune deficiency virus.

DIF: Understanding/Comprehension REF: 341
KEY: HIV/AIDS| safer sex| infection| immune disorders
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. The nurse providing direct client care uses specific practices to reduce the chance of acquiring infection with human immune deficiency virus (HIV) from clients. Which practice is most effective?
a. Consistent use of Standard Precautions
b. Double-gloving before body fluid exposure
c. Labeling charts and armbands HIV+
d. Wearing a mask within 3 feet of the client

ANS: A
According to The Joint Commission, the most effective preventative measure to avoid HIV exposure is consistent use of Standard Precautions. Double-gloving is not necessary. Labeling charts and armbands in this fashion is a violation of the Health Information Portability and Accountability Act (HIPAA). Wearing a mask within 3 feet of the client is part of Airborne Precautions and is not necessary with every client contact.

DIF: Remembering/Knowledge REF: 343
KEY: HIV/AIDS| infection control| Standard Precautions| immune disorders
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A client with human immune deficiency virus is admitted to the hospital with fever, night sweats, and severe

cough. Laboratory results include a CD4+ cell count of 180/mm3 and a negative tuberculosis (TB) skin test 4 days ago. What action should the nurse take first?
a. Initiate Droplet Precautions for the client.
b. Notify the provider about the CD4+ results.
c. Place the client under Airborne Precautions.
d. Use Standard Precautions to provide care.

ANS: C
Since this clients CD4+ cell count is low, he or she may have anergy, or the inability to mount an immune response to the TB test. The nurse should first place the client on Airborne Precautions to prevent the spread of TB if it is present. Next the nurse notifies the provider about the low CD4+ count and requests alterative testing for TB. Droplet Precautions are not used for TB. Standard Precautions are not adequate in this case.

DIF: Applying/Application REF: 345
KEY: HIV/AIDS| Transmission-Based Precautions| infection control| immune disorders
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A nurse is talking with a client about a negative enzyme-linked immunosorbent assay (ELISA) test for human immune deficiency virus (HIV) antibodies. The test is negative and the client states Whew! I was really worried about that result. What action by the nurse is most important?
a. Assess the clients sexual activity and patterns.
b. Express happiness over the test result.
c. Remind the client about safer sex practices.
d. Tell the client to be retested in 3 months.

ANS: A
The ELISA test can be falsely negative if testing occurs after the client has become infected but prior to making antibodies to HIV. This period of time is known as the window period and can last up to 36 months. The nurse needs to assess the clients sexual behavior further to determine the proper response. The other actions are not the most important, but discussing safer sex practices is always appropriate.

DIF: Applying/Application REF: 347
KEY: HIV/AIDS| safer sexual practices| nursing assessment| immune disorders
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A client with human immune deficiency virus (HIV) has had a sudden decline in status with a large increase in viral load. What action should the nurse take first?
a. Ask the client about travel to any foreign countries.
b. Assess the client for adherence to the drug regimen.
c. Determine if the client has any new sexual partners.
d. Request information about new living quarters or pets.

ANS: B
Adherence to the complex drug regimen needed for HIV treatment can be daunting. Clients must take their medications on time and correctly at a minimum of 90% of the time. Since this clients viral load has increased dramatically, the nurse should first assess this factor. After this, the other assessments may or may not be needed.

DIF: Applying/Application REF: 349
KEY: HIV/AIDS| nursing assessment| immune disorders| medications
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A client is hospitalized with Pneumocystis jiroveci pneumonia. The client reports shortness of breath with activity and extreme fatigue. What intervention is best to promote comfort?
a. Administer sleeping medication.
b. Perform most activities for the client.

c. Increase the clients oxygen during activity.
d. Pace activities, allowing for adequate rest.

ANS: D
This client has two major reasons for fatigue: decreased oxygenation and systemic illness. The nurse should not do everything for the client but rather let the client do as much as possible within limits and allow for adequate rest in between. Sleeping medications may be needed but not as the first step, and only with caution. Increasing oxygen during activities may or may not be warranted, but first the nurse must try pacing the clients activity.

DIF: Applying/Application REF: 351
KEY: HIV/AIDS| immune disorders| rest and sleep| fatigue
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A client with HIV wasting syndrome has inadequate nutrition. What assessment finding by the nurse best indicates that goals have been met for this client problem?
a. Chooses high-protein food
b. Has decreased oral discomfort
c. Eats 90% of meals and snacks
d. Has a weight gain of 2 pounds/1 month

ANS: D
The weight gain is the best indicator that goals for this client problem have been met because it demonstrates that the client not only is eating well but also is able to absorb the nutrients.

DIF: Evaluating/Synthesis REF: 352
KEY: HIV/AIDS| malnutrition| nutrition
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

9. A client with acquired immune deficiency syndrome is hospitalized and has weeping Kaposis sarcoma lesions. The nurse dresses them with sterile gauze. When changing these dressings, which action is most important?
a. Adhering to Standard Precautions
b. Assessing tolerance to dressing changes
c. Performing hand hygiene before and after care
d. Disposing of soiled dressings properly

ANS: D
All of the actions are important, but due to the infectious nature of this illness, ensuring proper disposal of soiled dressings is vital.

DIF: Applying/Application REF: 353
KEY: HIV/AIDS| wound care| dressings| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A client has a primary selective immunoglobulin A deficiency. The nurse should prepare the client for self-management by teaching what principle of medical management?
a. Infusions will be scheduled every 3 to 4 weeks.
b. Treatment is aimed at treating specific infections.
c. Unfortunately, there is no effective treatment.
d. You will need many immunoglobulin A infusions.

ANS: B
Treatment for this disorder is vigorous management of infection, not infusion of exogenous immunoglobulins. The other responses are inaccurate.

DIF: Understanding/Comprehension REF: 356
KEY: Immune disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. An HIV-positive client is admitted to the hospital with Toxoplasma gondii infection. Which action by the nurse is most appropriate?
a. Initiate Contact Precautions.
b. Place the client on Airborne Precautions.
c. Place the client on Droplet Precautions.
d. Use Standard Precautions consistently.

ANS: D
Toxoplasma gondii infection is an opportunistic infection that poses no threat to immunocompetent health care workers. Use of Standard Precautions is sufficient to care for this client.

DIF: Applying/Application REF: 345
KEY: HIV/AIDS| infection control| Standard Precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. A client has just been diagnosed with human immune deficiency virus (HIV). The client is distraught and does not know what to do. What intervention by the nurse is best?
a. Assess the client for support systems.
b. Determine if a clergy member would help.
c. Explain legal requirements to tell sex partners.
d. Offer to tell the family for the client.

ANS: A
This client needs the assistance of support systems. The nurse should help the client identify them and what role they can play in supporting him or her. A clergy member may or may not be welcome. Legal requirements about disclosing HIV status vary by state. Telling the family for the client is enabling, and the client may not want the family to know.

DIF: Applying/Application REF: 354
KEY: HIV/AIDS| nursing assessment| psychosocial response| support| caring
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

13. A nurse works on a unit that has admitted its first client with acquired immune deficiency syndrome. The nurse overhears other staff members talking about the AIDS guy and wondering how the client contracted the disease. What action by the nurse is best?
a. Confront the staff members about unethical behavior.
b. Ignore the behavior; they will stop on their own soon.
c. Report the behavior to the units nursing management.
d. Tell the client that other staff members are talking about him or her.

ANS: A
The professional nurse should be able to confront unethical behavior assertively. The staff should not be talking about clients unless they have a need to do so for client care. Ignoring the behavior may be more comfortable, but the nurse is abdicating responsibility. The behavior may need to be reported, but not as a first step. Telling the client that others are talking about him or her does not accomplish anything.

DIF: Applying/Application REF: 355
KEY: HIV/AIDS| communication| advocacy| caring| patient-centered care
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A client has been hospitalized with an opportunistic infection secondary to acquired immune deficiency

syndrome. The clients partner is listed as the emergency contact, but the clients mother insists that she should be listed instead. What action by the nurse is best?
a. Contact the social worker to assist the client with advance directives.
b. Ignore the mother; the client does not want her to be involved.
c. Let the client know, gently, that nurses cannot be involved in these disputes.
d. Tell the client that, legally, the mother is the emergency contact.

ANS: A
The client should make his or her wishes known and formalize them through advance directives. The nurse should help the client by contacting someone to help with this process. Ignoring the mother or telling the client that nurses cannot be involved does not help the situation. Legal statutes vary by state; as more states recognize gay marriage, this issue will continue to evolve.

DIF: Applying/Application REF: 347
KEY: HIV/AIDS| autonomy| advocacy| referrals| LGBTQ
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A client with human immune deficiency virus infection is hospitalized for an unrelated condition, and several medications are prescribed in addition to the regimen already being used. What action by the nurse is most important?
a. Consult with the pharmacy about drug interactions.
b. Ensure that the client understands the new medications.
c. Give the new drugs without considering the old ones.
d. Schedule all medications at standard times.

ANS: A
The drug regimen for someone with HIV/AIDS is complex and consists of many medications that must be given at specific times of the day, and that have many interactions with other drugs. The nurse should consult with a pharmacist about possible interactions. Client teaching is important but does not take priority over ensuring the medications do not interfere with each other, which could lead to drug resistance or a resurgence of symptoms.

DIF: Applying/Application REF: 350
KEY: HIV/AIDS| immune disorder| antiretrovirals| HAART
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A client with acquired immune deficiency syndrome has been hospitalized with suspected cryptosporidiosis. What physical assessment would be most consistent with this condition?
a. Auscultating the lungs
b. Assessing mucous membranes
c. Listening to bowel sounds
d. Performing a neurologic examination

ANS: B
Cryptosporidiosis can cause extreme loss of fluids and electrolytes, up to 20 L/day. The nurse should assess signs of hydration/dehydration as the priority, including checking the clients mucous membranes for dryness. The nurse will perform the other assessments as part of a comprehensive assessment.

DIF: Applying/Application REF: 345
KEY: HIV/AIDS| nursing assessment| fluids and electrolytes
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

17. A client with HIV/AIDS asks the nurse why gabapentin (Neurontin) is part of the drug regimen when the client does not have a history of seizures. What response by the nurse is best?
a. Gabapentin can be used as an antidepressant too.
b. I have no idea why you should be taking this drug.

c. This drug helps treat the pain from nerve irritation.
d. You are at risk for seizures due to fungal infections.

ANS: C
Many classes of medications are used for neuropathic pain, including tricyclic antidepressants such as gabapentin. It is not being used as an antidepressant or to prevent seizures from fungal infections. If the nurse does not know the answer, he or she should find out for the client.

DIF: Understanding/Comprehension REF: 352
KEY: HIV/AIDS| neuropathic pain| tricyclic antidepressants| pain| pharmacologic pain management MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

18. A nurse is caring for four clients who have immune disorders. After receiving the hand-off report, which client should the nurse assess first?
a. Client with acquired immune deficiency syndrome with a CD4+ cell count of 210/mm3 and a temp of 102.4 F (39.1 C)
b. Client with Brutons agammaglobulinemia who is waiting for discharge teaching
c. Client with hypogammaglobulinemia who is 1 hour post immune serum globulin infusion
d. Client with selective immunoglobulin A deficiency who is on IV antibiotics for pneumonia

ANS: A
A client who is this immunosuppressed and who has this high of a fever is critically ill and needs to be assessed first. The client who is post immunoglobulin infusion should have had all infusion-related vital signs and assessments completed and should be checked next. The client receiving antibiotics should be seen third, and the client waiting for discharge teaching is the lowest priority. Since discharge teaching can take time, the nurse may want to delegate this task to someone else while attending to the most seriously ill client.

DIF: Applying/Application REF: 349
KEY: HIV/AIDS| immune disorders| prioritizing| fever| infection| white blood cell count
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. An HIV-negative client who has an HIV-positive partner asks the nurse about receiving Truvada (emtricitabine and tenofovir). What information is most important to teach the client about this drug?
a. Truvada does not reduce the need for safe sex practices.
b. This drug has been taken off the market due to increases in cancer.
c. Truvada reduces the number of HIV tests you will need.
d. This drug is only used for postexposure prophylaxis.

ANS: A
Truvada is a new drug used for pre-exposure prophylaxis and appears to reduce transmission of human immune deficiency virus (HIV) from known HIV-positive people to HIV-negative people. The drug does not reduce the need for practicing safe sex. Since the drug can lead to drug resistance if used, clients will still need HIV testing every 3 months. This drug has not been taken off the market and is not used for postexposure prophylaxis.

DIF: Understanding/Comprehension REF: 343
KEY: HIV/AIDS| immune disorders| vaccinations| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A student nurse is learning about human immune deficiency virus (HIV) infection. Which statements about HIV infection are correct? (Select all that apply.)
a. CD4+ cells begin to create new HIV virus particles.
b. Antibodies produced are incomplete and do not function well.
c. Macrophages stop functioning properly.

d. Opportunistic infections and cancer are leading causes of death.
e. People with stage 1 HIV disease are not infectious to others.

ANS: A, B, C, D
In HIV, CD4+ cells begin to create new HIV particles. Antibodies the client produces are incomplete and do not function well. Macrophages also stop functioning properly. Opportunistic infections and cancer are the two leading causes of death in clients with HIV infection. People infected with HIV are infectious in all stages of the disease.

DIF: Remembering/Knowledge REF: 338
KEY: HIV/AIDS| immune disorders| inflammation
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. Which findings are AIDS-defining characteristics? (Select all that apply.)
a. CD4+ cell count less than 200/mm3 or less than 14%
b. Infection with Pneumocystis jiroveci
c. Positive enzyme-linked immunosorbent assay (ELISA) test for human immune deficiency virus (HIV)
d. Presence of HIV wasting syndrome
e. Taking antiretroviral medications

ANS: A, B, D
A diagnosis of AIDS requires that the person be HIV positive and have either a CD4+ T-cell count of less than 200 cells/mm3 or less than 14% (even if the total CD4+ count is above 200 cells/mm3) or an opportunistic infection such as Pneumocystis jiroveci and HIV wasting syndrome. Having a positive ELISA test and taking antiretroviral medications are not AIDS-defining characteristics.

DIF: Remembering/Knowledge REF: 339
KEY: HIV/AIDS| immune disorders MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is traveling to a third-world country with a medical volunteer group to work with people who are infected with human immune deficiency virus (HIV). The nurse should recognize that which of the following might be a barrier to the prevention of perinatal HIV transmission? (Select all that apply.)
a. Clean drinking water
b. Cultural beliefs about illness
c. Lack of antiviral medication
d. Social stigma
e. Unknown transmission routes

ANS: A, B, C, D
Treatment and prevention of HIV is complex, and in third-world countries barriers exist that one might not otherwise think of. Mothers must have access to clean drinking water if they are to mix formula. Cultural beliefs about illness, lack of available medications, and social stigma are also possible barriers. Perinatal transmission is well known to occur across the placenta during birth, from exposure to blood and body fluids during birth, and through breast-feeding.

DIF: Analyzing/Analysis REF: 343
KEY: HIV/AIDS| infection control| culture| patient-centered care
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Psychosocial Integrity

4. A client with acquired immune deficiency syndrome (AIDS) is hospitalized with Pneumocystis jiroveci pneumonia and is started on the drug of choice for this infection. What laboratory values should the nurse report to the provider as a priority? (Select all that apply.)
a. Aspartate transaminase, alanine transaminase: elevated
b. CD4+ cell count: 180/mm3
c. Creatinine: 1.0 mg/dL
d. Platelet count: 80,000/mm3

e. Serum sodium: 120 mEq/L

ANS: A, D, E
The drug of choice to treat Pneumocystis jiroveci pneumonia is trimethoprim with sulfamethoxazole (Septra). Side effects of this drug include hepatitis, hyponatremia, and thrombocytopenia. The elevated liver enzymes, low platelet count, and low sodium should all be reported. The CD4+ cell count is within the expected range for a client with an AIDS-defining infection. The creatinine level is normal.

DIF: Analyzing/Analysis REF: 351
KEY: HIV/AIDS| laboratory values| antibiotics| immune disorders
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A client with acquired immune deficiency syndrome has oral thrush and difficulty eating. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Apply oral anesthetic gels before meals.
b. Assist the client with oral care every 2 hours.
c. Offer the client frequent sips of cool drinks.
d. Provide the client with alcohol-based mouthwash.
e. Remind the client to use only a soft toothbrush.

ANS: B, C, E
The UAP can help the client with oral care, offer fluids, and remind the client of things the nurse (or other professional) has already taught. Applying medications is performed by the nurse. Alcohol-based mouthwashes are harsh and drying and should not be used.

DIF: Applying/Application REF: 352
KEY: HIV/AIDS| delegation| unlicensed assistive personnel (UAP)| oral care
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A client with acquired immune deficiency syndrome is in the hospital with severe diarrhea. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Assessing the clients fluid and electrolyte status
b. Assisting the client to get out of bed to prevent falls
c. Obtaining a bedside commode if the client is weak
d. Providing gentle perianal cleansing after stools
e. Reporting any perianal abnormalities

ANS: B, C, D, E
The UAP can assist the client with getting out of bed, obtain a bedside commode for the clients use, cleanse the clients perianal area after bowel movements, and report any abnormal observations such as redness or open areas. The nurse assesses fluid and electrolyte status.

DIF: Applying/Application REF: 352
KEY: HIV/AIDS| delegation| hygiene| elimination| patient safety| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A client with acquired immune deficiency syndrome and esophagitis due to Candida fungus is scheduled for an endoscopy. What actions by the nurse are most appropriate? (Select all that apply.)
a. Assess the clients mouth and throat.
b. Determine if the client has a stiff neck.
c. Ensure that the consent form is on the chart.
d. Maintain NPO status as prescribed.
e. Percuss the clients abdomen.

ANS: A, C, D
Oral Candida fungal infections can lead to esophagitis. This is diagnosed with an endoscopy and biopsy. The

nurse assesses the clients mouth and throat beforehand, ensures valid consent is on the chart, and maintains the client in NPO status as prescribed. A stiff neck and abdominal percussion are not related to this diagnostic procedure.

DIF: Applying/Application REF: 345
KEY: HIV/AIDS| nursing assessment| informed consent| NPO| endoscopy
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 20: Care of Patients with Hypersensitivity (Allergy) and Autoimmunity

MULTIPLE CHOICE

1. A nurse works in an allergy clinic. What task performed by the nurse takes priority?
a. Checking emergency equipment each morning
b. Ensuring informed consent is obtained as needed
c. Providing educational materials in several languages
d. Teaching clients how to manage their allergies

ANS: A
All actions are appropriate for this nurse; however, client safety is the priority. The nurse should ensure that emergency equipment is available and in good working order and that sufficient supplies of emergency medications are on hand as the priority responsibility. When it is appropriate for a client to give informed consent, the nurse ensures the signed forms are on the chart. Providing educational materials in several languages is consistent with holistic care. Teaching is always a major responsibility of all nurses.

DIF: Applying/Application REF: 362
KEY: Immune disorders| inflammation| resuscitation| anaphylaxis| medical emergencies| patient safety MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A client is in the preoperative holding area prior to surgery. The nurse notes that the client has allergies to avocados and strawberries. What action by the nurse is best?
a. Assess that the client has been NPO as directed.
b. Communicate this information with dietary staff.
c. Document the information in the clients chart.
d. Ensure the information is relayed to the surgical team.

ANS: D
A client with allergies to avocados, strawberries, bananas, or nuts has a higher risk of latex allergy. The nurse should ensure that the surgical staff is aware of this so they can provide a latex-free environment. Ensuring the clients NPO status is important for a client having surgery but is not directly related to the risk of latex allergy. Dietary allergies will be communicated when a diet order is placed. Documentation should be thorough but does not take priority.

DIF: Applying/Application REF: 364
KEY: Allergic response| communication| patient safety| immune disorders
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. The nurse is caring for clients on the medical-surgical unit. What action by the nurse will help prevent a client from having a type II hypersensitivity reaction?
a. Administering steroids for severe serum sickness
b. Correctly identifying the client prior to a blood transfusion
c. Keeping the client free of the offending agent
d. Providing a latex-free environment for the client

ANS: B
A classic example of a type II hypersensitivity reaction is a blood transfusion reaction. These can be prevented by correctly identifying the client and cross-checking the unit of blood to be administered. Serum sickness is a type III reaction. Avoidance therapy is the cornerstone of treatment for a type IV hypersensitivity. Latex allergies are a type I hypersensitivity.

DIF: Applying/Application REF: 367
KEY: Hypersensitivities| inflammation| immunity| autoimmune disorder
MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse suspects a client has serum sickness. What laboratory result would the nurse correlate with this condition?
a. Blood urea nitrogen: 12 mg/dL
b. Creatinine: 3.2 mg/dL
c. Hemoglobin: 8.2 mg/dL
d. White blood cell count: 12,000/mm3

ANS: B
The creatinine is high, possibly indicating the client has serum sickness nephritis. Blood urea nitrogen and white blood cell count are both normal. Hemoglobin is not related.

DIF: Analyzing/Analysis REF: 367
KEY: Hypersensitivities| immunity| antibodies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A client calls the clinic to report exposure to poison ivy and an itchy rash that is not helped with over-the-counter antihistamines. What response by the nurse is most appropriate?
a. Antihistamines do not help poison ivy.
b. There are different antihistamines to try.
c. You should be seen in the clinic right away.
d. You will need to take some IV steroids.

ANS: A
Since histamine is not the mediator of a type IV reaction such as with poison ivy, antihistamines will not provide relief. The nurse should educate the client about this. The client does not need to be seen right away. The client may or may not need steroids; they may be given either IV or orally.

DIF: Understanding/Comprehension REF: 368
KEY: Hypersensitivities| immunity| antibodies| antihistamines
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A client with Sjgrens syndrome reports dry skin, eyes, mouth, and vagina. What nonpharmacologic comfort measure does the nurse suggest?
a. Frequent eyedrops
b. Home humidifier
c. Strong moisturizer
d. Tear duct plugs

ANS: B
A humidifier will help relieve many of the clients Sjgrens syndrome symptoms. Eyedrops and tear duct plugs only affect the eyes, and moisturizer will only help the skin.

DIF: Understanding/Comprehension REF: 369
KEY: Autoimmune disorders| skin| patient education| nonpharmacologic comfort interventions MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A client is receiving plasmapheresis as treatment for Goodpastures syndrome. When planning care, the nurse places highest priority on interventions for which client problem?
a. Reduced physical activity related to the diseases effects on the lungs
b. Inadequate family coping related to the clients hospitalization
c. Inadequate knowledge related to the plasmapheresis process
d. Potential for infection related to the site for organism invasion

ANS: D

Physical diagnoses take priority over psychosocial diagnoses, so inadequate family coping and inadequate knowledge are not the priority. The client has a potential for infection because plasmapheresis is an invasive procedure. Reduced activity is manifested by changes in vital signs, oxygenation, or electrocardiogram, and/or reports of chest pain or shortness of breath. There is no information in the question to indicate that the client is experiencing reduced physical activity.

DIF: Applying/Application REF: 369
KEY: Autoimmune disorder| infection| nursing diagnosis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse has educated a client on an epinephrine auto-injector (EpiPen). What statement by the client indicates additional instruction is needed?
a. I dont need to go to the hospital after using it.
b. I must carry two EpiPens with me at all times.
c. I will write the expiration date on my calendar.
d. This can be injected right through my clothes.

ANS: A
Clients should be instructed to call 911 and go to the hospital for monitoring after using the EpiPen. The other statements show good understanding of this treatment.

DIF: Evaluating/Synthesis REF: 364
KEY: Allergic response| epinephrine| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

9. A client having severe allergy symptoms has received several doses of IV antihistamines. What action by the nurse is most important?
a. Assess the clients bedside glucose reading.
b. Instruct the client not to get up without help.
c. Monitor the client frequently for tachycardia.
d. Record the clients intake, output, and weight.

ANS: B
Antihistamines can cause drowsiness, so for the clients safety, he or she should be instructed to call for assistance prior to trying to get up. Hyperglycemia and tachycardia are side effects of sympathomimetics. Fluid and sodium retention are side effects of corticosteroids.

DIF: Applying/Application REF: 366
KEY: Allergic response| antihistamines| patient safety| falls
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A client is in the hospital and receiving IV antibiotics. When the nurse answers the clients call light, the client presents an appearance as shown below:

What action by the nurse takes priority?
a. Administer epinephrine 1:1000, 0.3 mg IV push immediately.
b. Apply oxygen by facemask at 100% and a pulse oximeter.
c. Ensure a patent airway while calling the Rapid Response Team.
d. Reassure the client that these manifestations will go away.

ANS: C
The nurse should ensure the clients airway is patent and either call the Rapid Response Team or delegate this to someone else. Epinephrine needs to be administered right away, but not without a prescription by the physician unless standing orders exist. The client may need oxygen, but a patent airway comes first. Reassurance is important, but airway and calling the Rapid Response Team are the priorities.

DIF: Analyzing/Analysis REF: 365
KEY: Rapid Response Team| critical rescue| anaphylaxis| resuscitation| epinephrine
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A client suffered an episode of anaphylaxis and has been stabilized in the intensive care unit. When assessing the clients lungs, the nurse hears the following sounds. What medication does the nurse prepare to administer?
(Click the media button to hear the audio clip.)
a. Albuterol (Proventil) via nebulizer
b. Diphenhydramine (Benadryl) IM
c. Epinephrine 1:10,000 5 mg IV push
d. Methylprednisolone (Solu-Medrol) IV push

ANS: A
The nurse has auscultated wheezing in the clients lungs and prepares to administer albuterol, which is a bronchodilator, or assists respiratory therapy with administration. Diphenhydramine is an antihistamine. Epinephrine is given during an acute crisis in a concentration of 1:1000. Methylprednisolone is a corticosteroid.

DIF: Analyzing/Analysis REF: 366
KEY: Anaphylaxis| bronchodilator| nursing assessment| medication administration| respiratory system| respiratory assessment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. The nursing student is studying hypersensitivity reactions. Which reactions are correctly matched with their hypersensitivity types? (Select all that apply.)
a. Type I Examples include hay fever and anaphylaxis
b. Type II Mediated by action of immunoglobulin M (IgM)
c. Type III Immune complex deposits in blood vessel walls
d. Type IV Examples are poison ivy and transplant rejection
e. Type V Examples include a positive tuberculosis test and sarcoidosis

ANS: A, C, D
Type I reactions are mediated by immunoglobulin E (IgE) and include hay fever, anaphylaxis, and allergic asthma. Type III reactions consist of immune complexes that form and deposit in the walls of blood vessels. Type IV reactions include responses to poison ivy exposure, positive tuberculosis tests, and graft rejection. Type II reactions are mediated by immunoglobulin G, not IgM. Type V reactions include Graves disease and B-cell gammopathies.

DIF: Remembering/Knowledge REF: 361
KEY: Immunity| immune disorders| immunoglobulins| inflammation
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A client in the family practice clinic reports a 2-week history of an allergy to something. The nurse obtains the following assessment and laboratory data:
Physical Assessment Data Laboratory Results
Reports sore throat, runny nose, headache
Posterior pharynx is reddened
Nasal discharge is seen in the back of the throat
Nasal discharge is creamy yellow in color
Temperature 100.2 F (37.9 C)
Red, watery eyes White blood cell count: 13,400/mm3
Eosinophil count: 11.5%
Neutrophil count: 82%

About what medications and interventions does the nurse plan to teach this client? (Select all that apply.)
a. Elimination of any pets
b. Chlorpheniramine (Chlor-Trimaton)
c. Future allergy scratch testing
d. Proper use of decongestant nose sprays
e. Taking the full dose of antibiotics

ANS: B, C, D, E
This client has manifestations of both allergic rhinitis and an overlying infection (probably sinus, as evidenced by purulent nasal drainage, high white blood cells, and high neutrophils). The client needs education on antihistamines such as chlorpheniramine, future allergy testing, the proper way to use decongestant nasal sprays, and ensuring that the full dose of antibiotics is taken. Since the nurse does not yet know what the client is allergic to, advising him or her to get rid of pets is premature.

DIF: Analyzing/Analysis REF: 361
KEY: Infection| inflammation| white blood cell count| allergic response| histamine blockers| decongestants| patient education
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 21: Cancer Development

MULTIPLE CHOICE

1. The student nurse learning about cellular regulation understands that which process occurs during the S phase of the cell cycle?
a. Actual division (mitosis)
b. Doubling of DNA
c. Growing extra membrane
d. No reproductive activity

ANS: B
During the S phase, the cell must double its DNA content through DNA synthesis. Actual division, or mitosis, occurs during the M phase. Growing extra membrane occurs in the G1 phase. During the G0 phase, the cell is working but is not involved in any reproductive activity.

DIF: Remembering/Knowledge REF: 373
KEY: Cellular regulation| physiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A student nurse asks the nursing instructor what apoptosis means. What response by the instructor is best?
a. Growth by cells enlarging
b. Having the normal number of chromosomes
c. Inhibition of cell growth
d. Programmed cell death

ANS: D
Apoptosis is programmed cell death. With this characteristic, organs and tissues function with cells that are at their peak of performance. Growth by cells enlarging is hyperplasia. Having the normal number of chromosomes is euploidy. Inhibition of cell growth is contact inhibition.

DIF: Understanding/Comprehension REF: 373
KEY: Cellular regulation| physiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. The nursing instructor explains the difference between normal cells and benign tumor cells. What information does the instructor provide about these cells?
a. Benign tumors grow through invasion of other tissue.
b. Benign tumors have lost their cellular regulation from contact inhibition.
c. Growing in the wrong place or time is typical of benign tumors.
d. The loss of characteristics of the parent cells is called anaplasia.

ANS: C
Benign tumors are basically normal cells growing in the wrong place or at the wrong time. Benign cells grow through hyperplasia, not invasion. Benign tumor cells retain contact inhibition. Anaplasia is a characteristic of cancer cells.

DIF: Understanding/Comprehension REF: 374
KEY: Cellular regulation| physiology| benign tumors
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A group of nursing students has entered a futuristic science contest in which they have developed a cure for cancer. Which treatment would most likely be the winning entry?
a. Artificial fibronectin infusion to maintain tight adhesion of cells
b. Chromosome repair kit to halt rapid division of cancer cells
c. Synthetic enzyme transfusion to allow rapid cellular migration
d. Telomerase therapy to maintain chromosomal immortality

ANS: A
Cancer cells do not have sufficient fibronectin and so do not maintain tight adhesion with other cells. This is part of the mechanism of metastasis. Chromosome alterations in cancer cells (aneuploidy) consist of having too many, too few, or altered chromosome pairs. This does not necessarily lead to rapid cellular division. Rapid cellular migration is part of metastasis. Immortality is a characteristic of cancer cells due to too much telomerase.

DIF: Remembering/Knowledge REF: 375
KEY: Cellular regulation| cancer| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. Which statement about carcinogenesis is accurate?
a. An initiated cell will always become clinical cancer.
b. Cancer becomes a health problem once it is 1 cm in size.
c. Normal hormones and proteins do not promote cancer growth.
d. Tumor cells need to develop their own blood supply.

ANS: D
Tumors need to develop their own blood supply through a process called angiogenesis. An initiated cell needs a promoter to continue its malignant path. Normal hormones and proteins in the body can act as promoters. A 1-cm tumor is a detectable size, but other events have to occur for it to become a health problem.

DIF: Remembering/Knowledge REF: 375
KEY: Cellular regulation| pathophysiology| cancer
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. The nurse caring for oncology clients knows that which form of metastasis is the most common?
a. Bloodborne
b. Direct invasion
c. Lymphatic spread
d. Via bone marrow

ANS: A
Bloodborne metastasis is the most common way for cancer to metastasize. Direct invasion and lymphatic spread are other methods. Bone marrow is not a medium in which cancer spreads, although cancer can occur in the bone marrow.

DIF: Remembering/Knowledge REF: 376
KEY: Cancer| cellular regulation| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse is assessing a client with glioblastoma. What assessment is most important?
a. Abdominal palpation
b. Abdominal percussion
c. Lung auscultation
d. Neurologic examination

ANS: D
A glioblastoma arises in the brain. The most important assessment for this client is the neurologic examination.

DIF: Applying/Application REF: 377
KEY: Cancer| nursing assessment| neurologic system| neurologic assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse has taught a client about dietary changes that can reduce the chances of developing cancer. What

statement by the client indicates the nurse needs to provide additional teaching?
a. Foods high in vitamin A and vitamin C are important.
b. Ill have to cut down on the amount of bacon I eat.
c. Im so glad I dont have to give up my juicy steaks.
d. Vegetables, fruit, and high-fiber grains are important.

ANS: C
To decrease the risk of developing cancer, one should cut down on the consumption of red meats and animal fat. The other statements are correct.

DIF: Remembering/Knowledge REF: 380
KEY: Cancer| patient education| nursing evaluation
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

9. A client is in the oncology clinic for a first visit since being diagnosed with cancer. The nurse reads in the clients chart that the cancer classification is TISN0M0. What does the nurse conclude about this clients cancer?
a. The primary site of the cancer cannot be determined.
b. Regional lymph nodes could not be assessed.
c. There are multiple lymph nodes involved already.
d. There are no distant metastases noted in the report.

ANS: D
TIS stands for carcinoma in situ; N0 stands for no regional lymph node metastasis; and M0 stands for no distant metastasis.

DIF: Remembering/Knowledge REF: 378
KEY: Cancer| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A client asks the nurse if eating only preservative- and dye-free foods will decrease cancer risk. What response by the nurse is best?
a. Maybe; preservatives, dyes, and preparation methods may be risk factors.
b. No; research studies have never shown those things to cause cancer.
c. There are other things you can do that will more effectively lower your risk.
d. Yes; preservatives and dyes are well known to be carcinogens.

ANS: A
Dietary factors related to cancer development are poorly understood, although dietary practices are suspected to alter cancer risk. Suspected dietary risk factors include low fiber intake and a high intake of red meat or animal fat. Preservatives, preparation methods, and additives (dyes, flavorings, sweeteners) may have cancer-promoting effects. It is correct to say that other things can lower risk more effectively, but this does not give the client concrete information about how to do so, and also does not answer the clients question.

DIF: Understanding/Comprehension REF: 379
KEY: Cancer| patient education| nutrition MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. The nursing student learning about cancer development remembers characteristics of normal cells. Which characteristics does this include? (Select all that apply.)
a. Differentiated function
b. Large nucleus-to-cytoplasm ratio
c. Loose adherence
d. Nonmigratory
e. Specific morphology

ANS: A, D, E
Normal cells have the characteristics of differentiated function, nonmigratory, specific morphology, a smaller nucleus-to-cytoplasm ratio, tight adherence, and orderly and well-regulated growth.

DIF: Remembering/Knowledge REF: 373
KEY: Cellular regulation| physiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. The nurse working with oncology clients understands that interacting factors affect cancer development. Which factors does this include? (Select all that apply.)
a. Exposure to carcinogens
b. Genetic predisposition
c. Immune function
d. Normal doubling time
e. State of euploidy

ANS: A, B, C
The three interacting factors needed for cancer development are exposure to carcinogens, genetic predisposition, and immune function.

DIF: Remembering/Knowledge REF: 378
KEY: Cancer| cellular regulation| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is participating in primary prevention efforts directed against cancer. In which activities is this nurse most likely to engage? (Select all that apply.)
a. Demonstrating breast self-examination methods to women
b. Instructing people on the use of chemoprevention
c. Providing vaccinations against certain cancers
d. Screening teenage girls for cervical cancer
e. Teaching teens the dangers of tanning booths

ANS: B, C, E
Primary prevention aims to prevent the occurrence of a disease or disorder, in this case cancer. Secondary prevention includes screening and early diagnosis. Primary prevention activities include teaching people about chemoprevention, providing approved vaccinations to prevent cancer, and teaching teens the dangers of tanning beds. Breast examinations and screening for cervical cancer are secondary prevention methods.

DIF: Applying/Application REF: 381
KEY: Cancer| primary prevention| secondary prevention| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse is providing community education on the seven warning signs of cancer. Which signs are included? (Select all that apply.)
a. A sore that does not heal
b. Changes in menstrual patterns
c. Indigestion or trouble swallowing
d. Near-daily abdominal pain
e. Obvious change in a mole

ANS: A, B, C, E
The seven warning signs for cancer can be remembered with the acronym CAUTION: changes in bowel or bladder habits, a sore that does not heal, unusual bleeding or discharge, thickening or lump in the breast or elsewhere, indigestion or difficulty swallowing, obvious change in a wart or mole, and nagging cough or hoarseness. Abdominal pain is not a warning sign.

DIF: Remembering/Knowledge REF: 380

KEY: Cancer| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 22: Care of Patients with Cancer

MULTIPLE CHOICE

1. A nurse in the oncology clinic is providing preoperative education to a client just diagnosed with cancer. The client has been scheduled for surgery in 3 days. What action by the nurse is best?
a. Call the client at home the next day to review teaching.
b. Give the client information about a cancer support group.
c. Provide all the preoperative instructions in writing.
d. Reassure the client that surgery will be over soon.

ANS: A
Clients are often overwhelmed at a sudden diagnosis of cancer and may be more overwhelmed at the idea of a major operation so soon. This stress significantly impacts the clients ability to understand, retain, and recall information. The nurse should call the client at home the next day to review the teaching and to answer questions. The client may or may not be ready to investigate a support group, but this does not help with teaching. Giving information in writing is important (if the client can read it), but in itself will not be enough. Telling the client that surgery will be over soon is giving false reassurance and does nothing for teaching.

DIF: Applying/Application REF: 386
KEY: Cancer| patient education| psychosocial response
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse reads on a hospitalized clients chart that the client is receiving teletherapy. What action by the nurse is best?
a. Coordinate continuation of the therapy.
b. Place the client on radiation precautions.
c. No action by the nurse is needed at this time.
d. Restrict visitors to only adults over age 18.

ANS: A
The client needs to continue with radiation therapy, and the nurse can coordinate this with the appropriate department. The client is not radioactive, so radiation precautions and limiting visitors are not necessary.

DIF: Applying/Application REF: 388
KEY: Cancer| radiation therapy| communication| collaboration
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A new nurse has been assigned a client who is in the hospital to receive iodine-131 treatment. Which action by the nurse is best?
a. Ensure the client is placed in protective isolation.
b. Hand off a pregnant client to another nurse.
c. No special action is necessary to care for this client.
d. Read the policy on handling radioactive excreta.

ANS: D
This type of radioisotope is excreted in body fluids and excreta (urine and feces) and should not be handled directly. The nurse should read the facilitys policy for handling and disposing of this type of waste. The other actions are not warranted.

DIF: Applying/Application REF: 388
KEY: Cancer| radiation therapy
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A client in the oncology clinic reports her family is frustrated at her ongoing fatigue 4 months after radiation therapy for breast cancer. What response by the nurse is most appropriate?

a. Are you getting adequate rest and sleep each day?
b. It is normal to be fatigued even for years afterward.
c. This is not normal and Ill let the provider know.
d. Try adding more vitamins B and C to your diet.

ANS: B
Regardless of the cause, radiation-induced fatigue can be debilitating and may last for months or years after treatment has ended. Rest and adequate nutrition can affect fatigue, but it is most important that the client understands this is normal.

DIF: Understanding/Comprehension REF: 388
KEY: Cancer| radiation therapy| fatigue MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A client tells the oncology nurse about an upcoming vacation to the beach to celebrate completing radiation treatments for cancer. What response by the nurse is most appropriate?
a. Avoid getting salt water on the radiation site.
b. Do not expose the radiation area to direct sunlight.
c. Have a wonderful time and enjoy your vacation!
d. Remember you should not drink alcohol for a year.

ANS: B
The skin overlying the radiation site is extremely sensitive to sunlight after radiation therapy has been completed. The nurse should inform the client to avoid sun exposure to this area. This advice continues for 1 year after treatment has been completed. The other statements are not appropriate.

DIF: Understanding/Comprehension REF: 389
KEY: Cancer| radiation therapy| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A client is receiving chemotherapy through a peripheral IV line. What action by the nurse is most important?
a. Assessing the IV site every hour
b. Educating the client on side effects
c. Monitoring the client for nausea
d. Providing warm packs for comfort

ANS: A
Intravenous chemotherapy can cause local tissue destruction if it extravasates into the surrounding tissues. Peripheral IV lines are more prone to this than centrally placed lines. The most important intervention is prevention, so the nurse should check hourly to ensure the IV site is patent, or frequently depending on facility policy. Education and monitoring for side effects such as nausea are important for all clients receiving chemotherapy. Warm packs may be helpful for comfort, but if the client reports that an IV site is painful, the nurse needs to assess further.

DIF: Applying/Application REF: 392
KEY: Cancer| chemotherapy| nursing assessment| IV therapy
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A client with cancer is admitted to a short-term rehabilitation facility. The nurse prepares to administer the clients oral chemotherapy medications. What action by the nurse is most appropriate?
a. Crush the medications if the client cannot swallow them.
b. Give one medication at a time with a full glass of water.
c. No special precautions are needed for these medications.
d. Wear personal protective equipment when handling the medications.

ANS: D
During the administration of oral chemotherapy agents, nurses must take the same precautions that are used

when administering IV chemotherapy. This includes using personal protective equipment. These medications cannot be crushed, split, or chewed. Giving one at a time is not needed.

DIF: Applying/Application REF: 393
KEY: Cancer| chemotherapy| medication administration| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. The nurse working with oncology clients understands that which age-related change increases the older clients susceptibility to infection during chemotherapy?
a. Decreased immune function
b. Diminished nutritional stores
c. Existing cognitive deficits
d. Poor physical reserves

ANS: A
As people age, there is an age-related decrease in immune function, causing the older adult to be more susceptible to infection than other clients. Not all older adults have diminished nutritional stores, cognitive dysfunction, or poor physical reserves.

DIF: Remembering/Knowledge REF: 394
KEY: Cancer| chemotherapy| older adult| infection| chemotherapy
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

9. After receiving the hand-off report, which client should the oncology nurse see first?
a. Client who is afebrile with a heart rate of 108 beats/min
b. Older client on chemotherapy with mental status changes
c. Client who is neutropenic and in protective isolation
d. Client scheduled for radiation therapy today

ANS: B
Older clients often do not exhibit classic signs of infection, and often mental status changes are the first observation. Clients on chemotherapy who become neutropenic also often do not exhibit classic signs of infection. The nurse should assess the older client first. The other clients can be seen afterward.

DIF: Applying/Application REF: 394
KEY: Cancer| chemotherapy| infection| older adult| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A client has a platelet count of 9800/mm3. What action by the nurse is most appropriate?
a. Assess the client for calf pain, warmth, and redness.
b. Instruct the client to call for help to get out of bed.
c. Obtain cultures as per the facilitys standing policy.
d. Place the client on protective isolation precautions.

ANS: B
A client with a platelet count this low is at high risk for serious bleeding episodes. To prevent injury, the client should be instructed to call for help prior to getting out of bed. Calf pain, warmth, and redness might indicate a deep vein thrombosis, not associated with low platelets. Cultures and isolation relate to low white cell counts.

DIF: Applying/Application REF: 396
KEY: Cancer| patient safety| falls| patient education
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. A client hospitalized for chemotherapy has a hemoglobin of 6.1 mg/dL. What medication should the nurse prepare to administer?

a. Epoetin alfa (Epogen)
b. Filgrastim (Neupogen)
c. Mesna (Mesnex)
d. Oprelvekin (Neumega)

ANS: A
The clients hemoglobin is low, so the nurse should prepare to administer epoetin alfa, a colony-stimulating factor that increases production of red blood cells. Filgrastim is for neutropenia. Mesna is used to decrease bladder toxicity from some chemotherapeutic agents. Oprelvekin is used to increase platelet count.

DIF: Applying/Application REF: 396
KEY: Cancer| chemotherapy| anemia| medications| colony-stimulating factors
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A nurse works with clients who have alopecia from chemotherapy. What action by the nurse takes priority?
a. Helping clients adjust to their appearance
b. Reassuring clients that this change is temporary
c. Referring clients to a reputable wig shop
d. Teaching measures to prevent scalp injury

ANS: D
All of the actions are appropriate for clients with alopecia. However, the priority is client safety, so the nurse should first teach ways to prevent scalp injury.

DIF: Applying/Application REF: 398
KEY: Cancer| chemotherapy| patient education| injury prevention
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A client is receiving interleukins along with chemotherapy. What assessment by the nurse takes priority?
a. Blood pressure
b. Lung assessment
c. Oral mucous membranes
d. Skin integrity

ANS: A
Interleukins can cause capillary leak syndrome and fluid shifting, leading to intravascular volume depletion. Although all assessments are important in caring for clients with cancer, blood pressure and other assessments of fluid status take priority.

DIF: Applying/Application REF: 400
KEY: Cancer| chemotherapy| nursing assessment| fluid and electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14. A client is receiving rituximab (Rituxan) and asks how it works. What response by the nurse is best?
a. It causes rapid lysis of the cancer cell membranes.
b. It destroys the enzymes needed to create cancer cells.
c. It prevents the start of cell division in the cancer cells.
d. It sensitizes certain cancer cells to chemotherapy.

ANS: C
Rituxan prevents the initiation of cancer cell division. The other statements are not accurate.

DIF: Remembering/Knowledge REF: 401
KEY: Cancer| chemotherapy| biologic response modifiers
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. Four clients are receiving tyrosine kinase inhibitors (TKIs). Which of these four clients should the nurse assess first?
a. Client with dry, itchy, peeling skin
b. Client with a serum calcium of 9.2 mg/dL
c. Client with a serum potassium of 2.8 mEq/L
d. Client with a weight gain of 0.5 pound (1.1 kg) in 1 day

ANS: C
TKIs can cause electrolyte imbalances. This potassium level is very low, so the nurse should assess this client first. Dry, itchy, peeling skin can be a problem in clients receiving biologic response modifiers, and the nurse should assess that client next because of the potential for discomfort and infection. This calcium level is normal. TKIs can also cause weight gain, but the client with the low potassium level is more critical.

DIF: Applying/Application REF: 403
KEY: Cancer| biologic response modifiers| fluid and electrolyte imbalance| nursing assessment MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16. A nurse is assessing a female client who is taking progestins. What assessment finding requires the nurse to notify the provider immediately?
a. Irregular menses
b. Edema in the lower extremities
c. Ongoing breast tenderness
d. Red, warm, swollen calf

ANS: D
All clients receiving progestin therapy are at risk for thromboembolism. A red, warm, swollen calf is a manifestation of deep vein thrombosis and should be reported to the provider. Irregular menses, edema in the lower extremities, and breast tenderness are common side effects of the therapy.

DIF: Applying/Application REF: 405
KEY: Cancer| nursing assessment| hormone therapy| deep vein thrombosis
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

17. A client with a history of prostate cancer is in the clinic and reports new onset of severe low back pain. What action by the nurse is most important?
a. Assess the clients gait and balance.
b. Ask the client about the ease of urine flow.
c. Document the report completely.
d. Inquire about the clients job risks.

ANS: A
This client has manifestations of spinal cord compression, which can be seen with prostate cancer. This may affect both gait and balance and urinary function. For client safety, assessing gait and balance is the priority. Documentation should be complete. The client may or may not have occupational risks for low back pain, but with his history of prostate cancer, this should not be where the nurse starts investigating.

DIF: Applying/Application REF: 406
KEY: Cancer| oncologic emergencies| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

18. The nurse has taught a client with cancer ways to prevent infection. What statement by the client indicates that more teaching is needed?
a. I should take my temperature daily and when I dont feel well.
b. I will wash my toothbrush in the dishwasher once a week.
c. I wont let anyone share any of my personal items or dishes.
d. Its alright for me to keep my pets and change the litter box.

ANS: D
Clients should wash their hands after touching their pets and should not empty or scoop the cat litter box. The other statements are appropriate for self-management.

DIF: Evaluating/Synthesis REF: 395
KEY: Cancer| infection| patient education| nursing evaluation
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

19. A client has received a dose of ondansetron (Zofran) for nausea. What action by the nurse is most important?
a. Assess the client for a headache.
b. Assist the client in getting out of bed.
c. Instruct the client to reduce salt intake.
d. Weigh the client daily before the client eats.

ANS: B
Ondansetron side effects include postural hypotension, vertigo, and bradycardia, all of which increase the clients risk for injury. The nurse should assist the client when getting out of bed. Headache and fluid retention are not side effects of this drug.

DIF: Applying/Application REF: 398
KEY: Cancer| antiemetics| patient safety| adverse effects
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

20. A nurse working with clients who experience alopecia knows that which is the best method of helping clients manage the psychosocial impact of this problem?
a. Assisting the client to pre-plan for this event
b. Reassuring the client that alopecia is temporary
c. Teaching the client ways to protect the scalp
d. Telling the client that there are worse side effects

ANS: A
Alopecia does not occur for all clients who have cancer, but when it does, it can be devastating. The best action by the nurse is to teach the client about the possibility and to give the client multiple choices for preparing for this event. Not all clients will have the same reaction, but some possible actions the client can take are buying a wig ahead of time, buying attractive hats and scarves, and having a hairdresser modify a wig to look like the clients own hair. Teaching about scalp protection is important but does not address the psychosocial impact. Reassuring the client that hair loss is temporary and telling him or her that there are worse side effects are both patronizing and do not give the client tools to manage this condition.

DIF: Applying/Application REF: 398
KEY: Cancer| psychosocial response| caring| patient education
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

21. A client is admitted with superior vena cava syndrome. What action by the nurse is most appropriate?
a. Administer a dose of allopurinol (Aloprim).
b. Assess the clients serum potassium level.
c. Gently inquire about advance directives.
d. Prepare the client for emergency surgery.

ANS: C
Superior vena cava syndrome is often a late-stage manifestation. After the client is stabilized and comfortable, the nurse should initiate a conversation about advance directives. Allopurinol is used for tumor lysis syndrome. Potassium levels are important in tumor lysis syndrome, in which cell destruction leads to large quantities of potassium being released into the bloodstream. Surgery is rarely done for superior vena cava syndrome.

DIF: Applying/Application REF: 406
KEY: Cancer| advance directives| oncologic emergencies
MSC: Integrated Process: Caring
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

22. A client is having a catheter placed in the femoral artery to deliver yttrium-90 beads into a liver tumor. What action by the nurse is most important?
a. Assessing the clients abdomen beforehand
b. Ensuring that informed consent is on the chart
c. Marking the clients bilateral pedal pulses
d. Reviewing client teaching done previously

ANS: B
This is an invasive procedure requiring informed consent. The nurse should ensure that consent is on the chart. The other actions are also appropriate but not the priority.

DIF: Applying/Application REF: 388
KEY: Cancer| informed consent
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

23. A nurse works on an oncology unit and delegates personal hygiene to an unlicensed assistive personnel (UAP). What action by the UAP requires intervention from the nurse?
a. Allowing a very tired client to skip oral hygiene and sleep
b. Assisting clients with washing the perianal area every 12 hours
c. Helping the client use a soft-bristled toothbrush for oral care
d. Reminding the client to rinse the mouth with water or saline

ANS: A
Even though clients may be tired, they still need to participate in hygiene to help prevent infection. The other options are all appropriate.

DIF: Remembering/Knowledge REF: 395
KEY: Hygiene| cancer| delegation| oral care| infection| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

24. A client with cancer has anorexia and mucositis, and is losing weight. The clients family members continually bring favorite foods to the client and are distressed when the client wont eat them. What action by the nurse is best?
a. Explain the pathophysiologic reasons behind the client not eating.
b. Help the family show other ways to demonstrate love and caring.
c. Suggest foods and liquids the client might be willing to try to eat.
d. Tell the family the client isnt able to eat now no matter what they bring.

ANS: B
Families often become distressed when their loved ones wont eat. Providing food is a universal sign of caring, and to some people the refusal to eat signifies worsening of the condition. The best option for the nurse is to help the family find other ways to demonstrate caring and love, because with treatment-related anorexia and mucositis, the client is not likely to eat anything right now. Explaining the rationale for the problem is a good idea but does not suggest to the family anything that they can do for the client. Simply telling the family the client is not able to eat does not give them useful information and is dismissive of their concerns.

DIF: Applying/Application REF: 385
KEY: Cancer| nutrition| caring| patient education
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

25. A client in the emergency department reports difficulty breathing. The nurse assesses the clients

appearance as depicted below:

What action by the nurse is the priority?
a. Assess blood pressure and pulse.
b. Attach the client to a pulse oximeter.
c. Have the client rate his or her pain.
d. Start high-dose steroid therapy.

ANS: A
This client has superior vena cava syndrome, in which venous return from the head, neck, and trunk is blocked. Decreased cardiac output can occur. The nurse should assess indicators of cardiac output, including blood pressure and pulse, as the priority. The other actions are also appropriate but are not the priority.

DIF: Applying/Application REF: 406
KEY: Cancer| oncologic emergencies| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. The student nurse caring for clients who have cancer understands that the general consequences of cancer include which client problems? (Select all that apply.)
a. Clotting abnormalities from thrombocythemia
b. Increased risk of infection from white blood cell deficits
c. Nutritional deficits such as early satiety and cachexia
d. Potential for reduced gas exchange
e. Various motor and sensory deficits

ANS: B, C, D, E
The general consequences of cancer include reduced immunity and blood-producing functions, altered GI structure and function, decreased respiratory function, and motor and sensory deficits. Clotting problems often occur due to thrombocytopenia (not enough platelets), not thrombocythemia (too many platelets).

DIF: Remembering/Knowledge REF: 384
KEY: Cancer| pathophysiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is preparing to administer IV chemotherapy. What supplies does this nurse need? (Select all that apply.)
a. Chemo gloves
b. Facemask
c. Isolation gown
d. N95 respirator
e. Shoe covers

ANS: A, B, C
The Occupational Safety and Health Administration (OSHA) and the Oncology Nurses Society have developed safety guidelines for those preparing or administering IV chemotherapy. These include double gloves (or chemo gloves), a facemask, and a gown. An N95 respirator and shoe covers are not required.

DIF: Remembering/Knowledge REF: 392
KEY: Cancer| chemotherapy| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. A client on interferon therapy is reporting severe skin itching and irritation. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Apply moisturizers to dry skin.
b. Apply steroid creams to the skin.

c. Bathe the client using mild soap.
d. Help the client with a hot water bath.
e. Teach the client to avoid sunlight.

ANS: A, C
The nurse can delegate applying unscented moisturizer and using mild soap for bathing. Steroid creams are not used for this condition. Hot water will worsen the irritation. Client teaching is a nursing function.

DIF: Applying/Application REF: 401
KEY: Cancer| delegation| hygiene| skin care| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A client has thrombocytopenia. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Apply the clients shoes before getting the client out of bed.
b. Assist the client with ambulation.
c. Shave the client with a safety razor only.
d. Use a lift sheet to move the client up in bed.
e. Use the Waterpik on a low setting for oral care.

ANS: A, B, D
Clients with thrombocytopenia are at risk of significant bleeding even with minor injuries. The nurse instructs the UAP to put the clients shoes on before getting the client out of bed, assist with ambulation, shave the client with an electric razor, use a lift sheet when needed to reposition the client, and use a soft-bristled toothbrush for oral care.

DIF: Understanding/Comprehension REF: 396
KEY: Cancer| delegation| patient safety| thrombocytopenia| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A client has mucositis. What actions by the nurse will improve the clients nutrition? (Select all that apply.)
a. Assist with rinsing the mouth with saline frequently.
b. Encourage the client to eat room-temperature foods.
c. Give the client hot liquids to hold in the mouth.
d. Provide local anesthetic medications to swish and spit.
e. Remind the client to brush teeth gently after each meal.

ANS: A, B, D, E
Mucositis can interfere with nutrition. The nurse can help with rinsing the mouth frequently with water or saline; encouraging the client to eat cool, slightly warm, or room-temperature foods; providing swish-and-spit anesthetics; and reminding the client to keep the mouth clean by brushing gently after each meal. Hot liquids would be painful for the client.

DIF: Applying/Application REF: 397
KEY: Cancer| oral care| nutrition
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. A clients family members are concerned that telling the client about a new finding of cancer will cause extreme emotional distress. They approach the nurse and ask if this can be kept from the client. What actions by the nurse are most appropriate? (Select all that apply.)
a. Ask the family to describe their concerns more fully.
b. Consult with a social worker, chaplain, or ethics committee.
c. Explain the clients right to know and ask for their assistance.
d. Have the unit manager take over the care of this client and family.
e. Tell the family that this secret will not be kept from the client.

ANS: A, B, C
The clients right of autonomy means that the client must be fully informed as to his or her diagnosis and treatment options. The nurse cannot ethically keep this information from the client. The nurse can ask the family to explain their concerns more fully so everyone understands the concerns. A social worker, chaplain, or ethics committee can become involved to assist the nurse, client, and family. The nurse should explain the clients right to know and ask the family how best to proceed. The nurse should not abdicate responsibility for this difficult situation by transferring care to another nurse. Simply telling the family that he or she will not keep this secret sets up an adversarial relationship. Explaining this fact along with the concept of autonomy would be acceptable, but this by itself is not.

DIF: Applying/Application REF: 387
KEY: Cancer| autonomy| ethical principles| communication| collaboration with the interdisciplinary team| caring
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A client receiving chemotherapy has a white blood cell count of 1000/mm3. What actions by the nurse are most appropriate? (Select all that apply.)
a. Assess all mucous membranes every 4 to 8 hours.
b. Do not allow the client to eat meat or poultry.
c. Listen to lung sounds and monitor for cough.
d. Monitor the venous access device appearance with vital signs.
e. Take and record vital signs every 4 to 8 hours.

ANS: A, C, D, E
Depending on facility protocol, the nurse should assess this client for infection every 4 to 8 hours by assessing all mucous membranes, listening to lung sounds, monitoring for cough, monitoring the appearance of the venous access device, and recording vital signs. Eating meat and poultry is allowed.

DIF: Applying/Application REF: 394
KEY: Cancer| nursing assessment| infection| chemotherapy
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 23: Care of Patients with Infection

MULTIPLE CHOICE

1. The nursing instructor explaining infection tells students that which factor is the best and most important barrier to infection?
a. Colonization by host bacteria
b. Gastrointestinal secretions
c. Inflammatory processes
d. Skin and mucous membranes

ANS: D
The skin and mucous membranes are the most important barrier against infection. The other options are also barriers, but are considered secondary to skin and mucous membranes.

DIF: Understanding/Comprehension REF: 416
KEY: Infection| physiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nursing manager is concerned about the number of infections on the hospital unit. What action by the manager would best help prevent these infections?
a. Auditing staff members hand hygiene practices
b. Ensuring clients are placed in appropriate isolation
c. Establishing a policy to remove urinary catheters quickly
d. Teaching staff members about infection control methods

ANS: A
All methods will help prevent infection; however, health care workers lack of hand hygiene is the biggest cause of healthcare-associated infections. The manager can start with a hand hygiene audit to see if this is a contributing cause.

DIF: Applying/Application REF: 417
KEY: Infection control| infection| hand hygiene
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. A student nurse asks why brushing clients teeth with a toothbrush in the intensive care unit is important to infection control. What response by the registered nurse is best?
a. It mechanically removes biofilm on teeth.
b. Its easier to clean all surfaces with a brush.
c. Oral care is important to all our clients.
d. Toothbrushes last longer than oral swabs.

ANS: A
Biofilms are a complex group of bacteria that function within a slimy gel on surfaces such as teeth. Mechanical disruption (i.e., toothbrushing with friction) is the best way to control them. The other answers are not accurate

DIF: Understanding/Comprehension REF: 421
KEY: Infection| infection control| oral care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A client is admitted with possible sepsis. Which action should the nurse perform first?
a. Administer antibiotics.
b. Give an antipyretic.
c. Place the client in isolation.
d. Obtain specified cultures.

ANS: D

Prior to administering antibiotics, the nurse obtains the ordered cultures. Broad-spectrum antibiotics will be administered until the culture and sensitivity results are known. Antipyretics are given if the client is uncomfortable; fever is a defense mechanism. Giving antipyretics does not take priority over obtaining cultures. The client may or may not need isolation.

DIF: Applying/Application REF: 424
KEY: Infection| antibiotics| cultures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A client is hospitalized and on multiple antibiotics. The client develops frequent diarrhea. What action by the nurse is most important?
a. Consult with the provider about obtaining stool cultures.
b. Delegate frequent perianal care to unlicensed assistive personnel.
c. Place the client on NPO status until the diarrhea resolves.
d. Request a prescription for an anti-diarrheal medication.

ANS: A
Hospitalized clients who have three or more stools a day for 2 or more days are suspected of having infection with Clostridium difficile. The nurse should inform the practitioner and request stool cultures. Frequent perianal care is important and can be delegated but is not the priority. The client does not necessarily need to be NPO; if the client is NPO, the nurse ensures he or she is getting appropriate IV fluids to prevent dehydration. Anti-diarrheal medication may or may not be appropriate, and the diarrhea serves as the portal of exit for the infection.

DIF: Applying/Application REF: 428
KEY: Infection| cultures| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse is observing as an unlicensed assistive personnel (UAP) performs hygiene and changes a clients bed linens. What action by the UAP requires intervention by the nurse?
a. Not using gloves while combing the clients hair
b. Rinsing the clients commode pan after use
c. Shaking dirty linens and placing them on the floor
d. Wearing gloves when providing perianal care

ANS: C
Shaking dirty linens (or even clean linens) can spread microbes through the air. Placing linens on the floor contaminates the floor surface and can lead to infection spread via shoes. The other actions are appropriate. If the client has a scalp infection or infestation, the UAP should wear gloves; otherwise it is not required.

DIF: Applying/Application REF: 419
KEY: Infection| infection control| supervision| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A hospital unit is participating in a bioterrorism drill. A client is admitted with inhalation anthrax. Under what type of precautions does the charge nurse admit the client?
a. Airborne Precautions
b. Contact Precautions
c. Droplet Precautions
d. Standard Precautions

ANS: D
Only Standard Precautions are needed. No other special precautions are required for the client because inhalation anthrax is not spread person to person.

DIF: Applying/Application REF: 427

KEY: Infection| infection control| Standard Precautions| bioterrorism
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. Which action by the nurse is most helpful to prevent clients from acquiring infections while hospitalized?
a. Assessing skin and mucous membranes
b. Consistently using appropriate hand hygiene
c. Monitoring daily white blood cell counts
d. Teaching visitors not to visit if they are ill

ANS: B
Consistent practice of proper hand hygiene is the best method to prevent infection, as most healthcare-associated infections are due to staff members contaminated hands. Assessing the client and monitoring laboratory values will help the nurse catch signs of infection quickly but will not prevent infection from occurring. Teaching visitors not to come see the client when they are ill will also help prevent infection, but not to the degree that hand hygiene will.

DIF: Applying/Application REF: 417
KEY: Infection| infection control| hand hygiene
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A client is admitted with fever, myalgia, and a papular rash on the face, palms, and soles of the feet. What action should the nurse take first?
a. Obtain cultures of the lesions.
b. Place the client on Airborne Precautions.
c. Prepare to administer antibiotics.
d. Provide comfort measures for the rash.

ANS: B
This client has manifestations of smallpox, a public health emergency, and should be placed on Airborne Precautions first before other care measures are implemented.

DIF: Applying/Application REF: 419
KEY: Infection| Transmission-Based Precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A client has been placed on Contact Precautions. The clients family is very afraid to visit for fear of being contaminated by the client. What action by the nurse is best?
a. Explain to them that these precautions are mandated by law.
b. Inform them that the infection is the issue, not the client.
c. Reassure the family that they will not get the infection.
d. Tell the family it is important that they visit the client.

ANS: B
Families and clients often have negative reactions to isolation precautions. The nurse can explain that the infection is the problem, not the client, and encourage them to visit because following the precautions will prevent them from acquiring the infection. The other options do not give the family useful information to help them make an informed decision.

DIF: Applying/Application REF: 419
KEY: Infection| infection control| Transmission-Based Precautions| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

11. A nurse is caring for a client who has methicillin-resistant Staphylococcus aureus (MRSA) infection cultured from the urine. What action by the nurse is most appropriate?
a. Prepare to administer vancomycin (Vancocin).

b. Strictly limit visitors to immediate family only.
c. Wash hands only after taking off gloves after care.
d. Wear a respirator when handling urine output.

ANS: A
Vancomycin is one of a few drugs approved to treat MRSA. The others include linezolid (Zyvox) and ceftaroline fosamil (Teflaro). Visitation does not need to be limited to immediate family only. Hand hygiene is performed before and after wearing gloves. A respirator is not needed, but if splashing is anticipated, a face shield can be used.

DIF: Remembering/Knowledge REF: 422
KEY: Infection| antibiotics
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A hospitalized client is placed on Contact Precautions. The client needs to have a computed tomography (CT) scan. What action by the nurse is most appropriate?
a. Ensure that the radiology department is aware of the isolation precautions.
b. Plan to travel with the client to ensure appropriate precautions are used.
c. No special precautions are needed when this client leaves the unit.
d. Notify the physician that the client cannot leave the room for the CT scan.

ANS: A
Clients in isolation should leave their rooms only when necessary, such as for a CT scan that cannot be done portably in the room. The nurse should ensure that the receiving department is aware of the isolation precautions needed to care for the client. The other options are not needed.

DIF: Applying/Application REF: 419
KEY: Infection| Transmission-Based Precautions| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A client has a wound infection to the right arm. What comfort measure can the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Elevate the arm above the level of the heart.
b. Order a fan to help cool the client if feverish.
c. Place cool, wet cloths on top of the wound.
d. Take the clients temperature every 4 hours.

ANS: A
Elevating the extremity above the level of the heart will help with swelling and pain. Fans are not recommended as they can disperse microbes. Having a cool, wet cloth on the wound may macerate the broken skin. Taking the clients temperature provides data but does not increase comfort.

DIF: Applying/Application REF: 417
KEY: Infection| nonpharmacologic comfort measures| delegation| unlicensed assistive personnel (UAP) MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

14. A nurse receives report from the laboratory on a client who was admitted for fever. The laboratory technician states that the client has a shift to the left on the white blood cell count. What action by the nurse is most important?
a. Document findings and continue monitoring.
b. Notify the provider and request antibiotics.
c. Place the client in protective isolation.
d. Tell the client this signifies inflammation.

ANS: B
A shift to the left indicates an increase in immature neutrophils and is often seen in infections, especially those

caused by bacteria. The nurse should notify the provider and request antibiotics. Documentation and teaching need to be done, but the nurse needs to do more. The client does not need protective isolation.

DIF: Applying/Application REF: 424
KEY: Infection| antibiotics| laboratory values
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A client has been admitted to the hospital for a virulent infection and is started on antibiotics. The client has laboratory work pending to determine if the diagnosis is meningitis. After starting the antibiotics, what action by the nurse is best?
a. Assess the client frequently for worsening of his or her condition.
b. Delegate comfort measures to unlicensed assistive personnel.
c. Ensure the client is placed on Contact Precautions.
d. Restrict visitors to the immediate family only.

ANS: A
Meningitis is a disease caused by endotoxins, which are released with cell lysis. Antibiotics often work by lysing cell membranes, which would increase the amount of endotoxin present in the clients body. The nurse should carefully monitor this client for a worsening of his or her condition. Delegating comfort measures is appropriate for any client. Clients with meningitis are placed on Droplet Precautions, and initiating isolation should have been done on admission. The client does not need to have visitors restricted.

DIF: Analyzing/Analysis REF: 414
KEY: Infection| Transmission-Based Precautions| antibiotics
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. The student nurse caring for clients understands that which factors must be present to transmit infection? (Select all that apply.)
a. Colonization
b. Host
c. Mode of transmission
d. Portal of entry
e. Reservoir

ANS: B, C, D, E
Factors that must be present in order to transmit an infection include a host with a portal of entry, a mode of transmission, and a reservoir. Colonization is not one of these factors.

DIF: Remembering/Knowledge REF: 414
KEY: Infection| pathophysiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. Which statements are true regarding Standard Precautions? (Select all that apply.)
a. Always wear a gown when performing hygiene on clients.
b. Sneeze into your sleeve or into a tissue that you throw away.
c. Remain 3 feet away from any client who has an infection.
d. Use personal protective equipment as needed for client care.
e. Wear gloves when touching client excretions or secretions.

ANS: D, E
Standard Precautions implies that contact with bodily secretions, excretions, and moist mucous membranes and tissues (excluding perspiration) is potentially infectious. Always wear gloves when coming into contact with such material. Other personal protective equipment is used based on the care being given. For example, if face splashing is expected, you should also wear a mask. Wearing a gown for hygiene is not required. Sneezing into your sleeve or tissue is part of respiratory etiquette. Remaining 3 feet away from clients is also not part of

Standard Precautions.

DIF: Remembering/Knowledge REF: 418
KEY: Infection| infection control| Standard Precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. The student nurse learns that effective antimicrobial therapy requires which factors to be present? (Select all that apply.)
a. Appropriate drug
b. Proper route of administration
c. Standardized peak levels
d. Sufficient dose
e. Sufficient length of treatment

ANS: A, B, D, E
In order to be effective, antimicrobial therapy must use the appropriate drug in a sufficient dose, for a sufficient length of time, and given via the appropriate route. Some antimicrobials do require monitoring for peak and trough levels, but not all.

DIF: Remembering/Knowledge REF: 425
KEY: Infection| antibiotics MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A client is being admitted with suspected tuberculosis (TB). What actions by the nurse are best? (Select all that apply.)
a. Admit the client to a negative-airflow room.
b. Maintain a distance of 3 feet from the client at all times.
c. Order specialized masks/respirators for caregiving.
d. Other than wearing gloves, no special actions are needed.
e. Wash hands with chlorhexidine after providing care.

ANS: A, C
A client with suspected TB is admitted to Airborne Precautions, which includes a negative-airflow room and special N95 or PAPR masks to be worn when providing care. A 3-foot distance is required for Droplet Precautions. Chlorhexidine is used for clients with a high risk of infection.

DIF: Applying/Application REF: 416
KEY: Infection| infection control| Transmission-Based Precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A student nurse asks the nursing instructor why older adults are more prone to infection than other adults. What reasons does the nursing instructor give? (Select all that apply.)
a. Age-related decrease in immune function
b. Decreased cough and gag reflexes
c. Diminished acidity of gastric secretions
d. Increased lymphocytes and antibodies
e. Thinning skin that is less protective

ANS: A, B, C, E
Older adults have several age-related changes making them more susceptible to infection, including decreased immune function, decreased cough and gag reflex, decreased acidity of gastric secretions, thinning skin, and fewer lymphocytes and antibodies.

DIF: Remembering/Knowledge REF: 414
KEY: Infection| older adult| immunity MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

6. A client with an infection has a fever. What actions by the nurse help increase the clients comfort? (Select all that apply.)
a. Administer antipyretics around the clock.
b. Change the clients gown and linens when damp.
c. Offer cool fluids to the client frequently.
d. Place ice bags in the armpits and groin.
e. Provide a fan to help cool the client.

ANS: B, C
Comfort measures appropriate for this client include offering frequent cool drinks, and changing linens or the gown when damp. Fever is a defense mechanism, and antipyretics should be administered only when the client is uncomfortable. Ice bags can help cool the client quickly but are not comfort measures. Fans are discouraged because they can disperse microbes.

DIF: Applying/Application REF: 425
KEY: Infection| infection control| comfort measures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

Chapter 24: Assessment of the Skin, Hair, and Nails

MULTIPLE CHOICE

1. While assessing a client, a nurse detects a bluish tinge to the clients palms, soles, and mucous membranes. Which action should the nurse take next?
a. Ask the client about current medications he or she is taking.
b. Use pulse oximetry to assess the clients oxygen saturation.
c. Auscultate the clients lung fields for adventitious sounds.
d. Palpate the clients bilateral radial and pedal pulses.

ANS: B
Cyanosis can be present when impaired gas exchange occurs. In a client with dark skin, cyanosis can be seen because the palms, soles, and mucous membranes have a bluish tinge. The nurse should assess for systemic oxygenation before continuing with other assessments.

DIF: Applying/Application REF: 438
KEY: Cyanosis
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse assesses a client who is admitted with inflamed soft-tissue folds around the nail plates. Which question should the nurse ask to elicit useful information about the possible condition?
a. What do you do for a living?
b. Are your nails professionally manicured?
c. Do you have diabetes mellitus?
d. Have you had a recent fungal infection?

ANS: A
The condition chronic paronychia is common in people with frequent intermittent exposure to water, such as homemakers, bartenders, and laundry workers. The other questions would not provide information specifically related to this assessment finding.

DIF: Applying/Application REF: 443
KEY: Infection
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nurse assesses a client who has multiple areas of ecchymosis on both arms. Which question should the nurse ask first?
a. Are you using lotion on your skin?
b. Do you have a family history of this?
c. Do your arms itch?
d. What medications are you taking?

ANS: D
Certain drugs such as aspirin, warfarin, and corticosteroids can lead to easy or excessive bruising, which can result in ecchymosis. The other options would not provide information about bruising.

DIF: Applying/Application REF: 440
KEY: Medications| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. After teaching a client who expressed concern about a rash located beneath her breast, a nurse assesses the clients understanding. Which statement indicates the client has a good understanding of this condition?
a. This rash is probably due to fluid overload.
b. I need to wash this daily with antibacterial soap.
c. I can use powder to keep this area dry.

d. I will schedule a mammogram as soon as I can.

ANS: C
Rashes limited to skinfold areas (e.g., on the axillae, beneath the breasts, in the groin) may reflect problems related to excessive moisture. The client needs to keep the area dry; one option is to use powder. Good hygiene is important, but the rash does not need an antibacterial soap. Fluid overload and breast cancer are not related to rashes in skinfolds.

DIF: Applying/Application REF: 440
KEY: Skin breakdown| hygiene MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse assesses a client who has two skin lesions on his chest. Each lesion is the size of a nickel, flat, and darker in color than the clients skin. How should the nurse document these lesions?
a. Two 2-cm hyperpigmented patches
b. Two 1-inch erythematous plaques
c. Two 2-mm pigmented papules
d. Two 1-inch moles

ANS: A
Patches are larger flat areas of the skin. The information provided does not indicate a mole or the presence of erythema.

DIF: Applying/Application REF: 439
KEY: Skin lesions/wounds| documentation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. While assessing a clients lower extremities, a nurse notices that one leg is pale and cooler to the touch. Which assessment should the nurse perform next?
a. Ask about a family history of skin disorders.
b. Palpate the clients pedal pulses bilaterally.
c. Check for the presence of Homans sign.
d. Assess the clients skin for adequate skin turgor.

ANS: B
Localized, decreased skin temperature and pallor indicate interference with vascular flow to the region. The nurse should assess bilateral pedal pulses to screen for vascular sufficiency. Without adequate blood flow, the clients limb could be threatened. Asking about a family history of skin problems would not take priority over assessing blood flow. Homans sign is a screening tool for deep vein thrombosis and is often inaccurate. Skin turgor gives information about hydration status. This assessment may be needed but certainly does not take priority over assessing for blood flow.

DIF: Applying/Application REF: 441
KEY: Vascular perfusion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse cares for an older adult client who has a chronic skin disorder. The client states, I have not been to church in several weeks because of the discoloration of my skin. How should the nurse respond?
a. I will consult the chaplain to provide you with spiritual support.
b. You do not need to go to church; God is everywhere.
c. Tell me more about your concerns related to your skin.
d. Religious people are nonjudgmental and will accept you.

ANS: C
Clients with chronic skin disorders often become socially isolated related to the fear of rejection by others. Nurses should assess how the clients skin changes are affecting the clients body image and encourage the client to express his or her feelings about a change in appearance. The other responses are not appropriate.

DIF: Applying/Application REF: 444
KEY: Support| coping
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

8. A nurse assesses a client who has open lesions. Which action should the nurse take first?
a. Put on gloves.
b. Ask the client about his or her occupation.
c. Assess the clients pain.
d. Obtain vital signs.

ANS: A
Nurses should wear gloves as part of Standard Precautions when examining skin that is not intact. The other options should be completed after gloves are put on.

DIF: Remembering/Knowledge REF: 445
KEY: Standard Precautions| skin lesions/wounds
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A nurse assesses a client who has a chronic skin disorder. Which finding indicates the client is effectively coping with the disorder?
a. Clean hair and nails
b. Poor eye contact
c. Disheveled appearance
d. Drapes a scarf over the face

ANS: A
The nurse should complete a psychosocial assessment to determine if the client is coping effectively. Signs of adequate coping include clean hair, skin, and nails; good eye contact; and being socially active. A disheveled appearance and draping a scarf over the face to hide the clients appearance demonstrate that the client may be having difficulty coping with his or her condition.

DIF: Understanding/Comprehension REF: 444
KEY: Skin lesions/wounds| coping
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

10. A nurse assesses a client and identifies that the client has pallor conjunctivae. Which focused assessment should the nurse complete next?
a. Partial thromboplastin time
b. Hemoglobin and hematocrit
c. Liver enzymes
d. Basic metabolic panel

ANS: B
Pallor conjunctivae signifies anemia. The nurse should assess the clients hemoglobin and hematocrit to confirm anemia. The other laboratory results do not relate to this clients potential anemia.

DIF: Applying/Application REF: 438
KEY: Anemia
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. During skin inspection of a client, a nurse observes lesions with wavy borders that are widespread across the clients chest. Which descriptors should the nurse use to document these observations?
a. Clustered and annular
b. Linear and circinate
c. Diffuse and serpiginous

d. Coalesced and circumscribed

ANS: B
Diffuse is used to describe lesions that are widespread. Serpiginous describes lesions with wavy borders. Clustered describes lesions grouped together. Linear describes lesions occurring in a straight line. Annular lesions are ringlike with raised borders, circinate lesions are circular, and circumscribed lesions have well-defined sharp borders. Coalesced describes lesions that merge with one another and appear confluent.

DIF: Remembering/Knowledge REF: 438
KEY: Skin lesions/wounds| documentation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. A nurse assesses an older adult client with the skin disorder shown below:

How should the nurse document this finding?
a. Petechiae
b. Ecchymoses
c. Actinic lentigo
d. Senile angiomas

ANS: A
Petechiae, or small, reddish purple nonraised lesions that do not fade or blanch with pressure, are pictured here. Ecchymoses are larger areas of hemorrhaging, commonly known as bruising. Actinic lentigo presents as paper-thin, transparent skin. Senile angiomas, also known as cherry angiomas, are red raised lesions.

DIF: Remembering/Knowledge REF: 438
KEY: Skin lesions/wounds| documentation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. A nurse assesses an older adults skin. Which findings require immediate referral? (Select all that apply.)
a. Excessive moisture under axilla
b. Increased hair thinning
c. Increased presence of fungal toenails
d. Lesion with various colors
e. Spider veins on legs
f. Asymmetric 6-mm dark lesion on forehead

ANS: D, F
The lesion with various colors, as well as the asymmetric 6-mm dark lesion, fits two of the American Cancer Societys hallmark signs for cancer according to the ABCD method. Other manifestations are variants of normal seen in various age groups.

DIF: Applying/Application REF: 437
KEY: Collaboration| skin lesions/wounds| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse plans care for a client who has a wound that is not healing. Which focused assessments should the nurse complete to develop the clients plan of care? (Select all that apply.)
a. Height
b. Allergies
c. Alcohol use
d. Prealbumin laboratory results
e. Liver enzyme laboratory results

ANS: A, C, D
Nutritional status can have a significant impact on skin health and wound healing. The care plan for a client with poor nutritional status should include a high-protein, high-calorie diet. To determine the clients nutritional status, the nurse should assess height and weight, alcohol use, and prealbumin laboratory results. These data will provide information related to vitamin and protein deficiencies, and obesity. Allergies and liver enzyme laboratory results will not provide information about nutrition status or wound healing.

DIF: Applying/Application REF: 436
KEY: Skin lesions/wounds| nutrition
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse teaches a client to perform total skin self-examinations on a monthly basis. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. Look for asymmetry of shape and irregular borders.
b. Assess for color variation within each lesion.
c. Examine the distribution of lesions over a section of the body.
d. Monitor for edema or swelling of tissues.
e. Focus your assessment on skin areas that itch.

ANS: A, B
Clients should be taught to examine each lesion following the ABCDE features associated with skin cancer: asymmetry of shape, border irregularity, color variation within one lesion, diameter greater than 6 mm, and evolving or changing in any feature.

DIF: Applying/Application REF: 437
KEY: Skin lesions/wounds MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 25: Care of Patients with Skin Problems

MULTIPLE CHOICE

1. A nurse teaches a client who has very dry skin. Which statement should the nurse include in this clients education?

a. Use lots of moisturizer several times a day to minimize dryness.

b. Take a cold shower instead of soaking in the bathtub.

c. Use antimicrobial soap to avoid infection of cracked skin.

d. After you bathe, put lotion on before your skin is totally dry.

ANS: D

The client should bathe in warm water for at least 20 minutes and then apply lotion immediately because this will keep the moisture in the skin. Just using moisturizer will not be as helpful because the moisturizer is not what rehydrates the skin; it is the water. Bathing in warm water will rehydrate skin more effectively than a cold shower, and antimicrobial soaps are actually more drying than other kinds of soap.

DIF: Applying/Application REF: 448

KEY: Hygiene| skin breakdown MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

2. A nurse assesses clients on a medical-surgical unit. Which client is at greatest risk for pressure ulcer development?

a. A 44-year-old prescribed IV antibiotics for pneumonia

b. A 26-year-old who is bedridden with a fractured leg

c. A 65-year-old with hemi-paralysis and incontinence

d. A 78-year-old requiring assistance to ambulate with a walker

ANS: C

Being immobile and being incontinent are two significant risk factors for the development of pressure ulcers. The client with pneumonia does not have specific risk factors. The young client who has a fractured leg and the client who needs assistance with ambulation might be at moderate risk if they do not move about much, but having two risk factors makes the 65-year-old the person at highest risk.

DIF: Applying/Application REF: 451

KEY: Skin breakdown| Braden Scale

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. When transferring a client into a chair, a nurse notices that the pressure-relieving mattress overlay has deep imprints of the clients buttocks, heels, and scapulae. Which action should the nurse take next?

a. Turn the mattress overlay to the opposite side.

b. Do nothing because this is an expected occurrence.

c. Apply a different pressure-relieving device.

d. Reinforce the overlay with extra cushions.

ANS: C

Bottoming out, as evidenced by deep imprints in the mattress overlay, indicates that this device is not appropriate for this client, and a different device or strategy should be implemented to prevent pressure ulcer formation.

DIF: Applying/Application REF: 455 KEY: Skin breakdown

MSC: Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse cares for a client who has a deep wound that is being treated with a wet-to-damp dressing. Which intervention should the nurse include in this clients plan of care?

a. Change the dressing every 6 hours.

b. Assess the wound bed once a day.

c. Change the dressing when it is saturated.

d. Contact the provider when the dressing leaks.

ANS: A

Wet-to-damp dressings are changed every 4 to 6 hours to provide maximum dbridement. The wound should be assessed each time the dressing is changed. Dry gauze dressings should be changed when the outer layer becomes saturated. Synthetic dressings can be left in place for extended periods of time but need to be changed if the seal breaks and the exudate leaks.

DIF: Applying/Application REF: 461

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse is caring for a client who has a pressure ulcer on the right ankle. Which action should the nurse take first?

a. Draw blood for albumin, prealbumin, and total protein.

b. Prepare for and assist with obtaining a wound culture.

c. Place the client in bed and instruct the client to elevate the foot.

d. Assess the right leg for pulses, skin color, and temperature.

ANS: D

A client with an ulcer on the foot should be assessed for interruption in arterial flow to the area. This begins with the assessment of pulses and color and temperature of the skin. The nurse can also assess for pulses noninvasively with a Doppler flowmeter if unable to palpate with his or her fingers. Tests to determine nutritional status and risk assessment would be completed after the initial assessment is done. Wound cultures are done after it has been determined that drainage, odor, and other risks for infection are present. Elevation of the foot would impair the ability of arterial blood to flow to the area.

DIF: Applying/Application REF: 458 KEY: Skin breakdown

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. After educating a caregiver of a home care client, a nurse assesses the caregivers understanding. Which statement indicates that the caregiver needs additional education?

a. I can help him shift his position every hour when he sits in the chair.

b. If his tailbone is red and tender in the morning, I will massage it with baby oil.

c. Applying lotion to his arms and legs every evening will decrease dryness.

d. Drinking a nutritional supplement between meals will help maintain his weight.

ANS: B

Massage of reddened areas over bony prominences such as the coccyx, or tailbone, is contraindicated because the pressure of the massage can cause damage to the skin and subcutaneous tissue layers. The other statements are appropriate for the care of a client at home.

DIF: Applying/Application REF: 453 KEY: Skin breakdown

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

7. After teaching a client who is at risk for the formation of pressure ulcers, a nurse assesses the clients understanding. Which dietary choice by the client indicates a good understanding of the teaching?

a. Low-fat diet with whole grains and cereals and vitamin supplements

b. High-protein diet with vitamins and mineral supplements

c. Vegetarian diet with nutritional supplements and fish oil capsules

d. Low-fat, low-cholesterol, high-fiber, low-carbohydrate diet

ANS: B

The preferred diet is high in protein to assist in wound healing and prevention of new wounds. Fat is also needed to ensure formation of cell membranes, so any of the options with low fat would not be good choices. A vegetarian diet would not provide fat and high levels of protein.

DIF: Applying/Application REF: 461

KEY: Skin breakdown| nutrition MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

8. A nurse assesses clients on a medical-surgical unit. Which client should the nurse evaluate for a wound infection?

a. Client with blood cultures pending

b. Client who has thin, serous wound drainage

c. Client with a white blood cell count of 23,000/mm^3

d. Client whose wound has decreased in size

ANS: C

A client with an elevated white blood cell count should be evaluated for sources of infection. Pending cultures, thin drainage, and a decrease in wound size are not indications that the client may have an infection.

DIF: Applying/Application REF: 462

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Planning

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse who manages client placements prepares to place four clients on a medical-surgical unit. Which client should be placed in isolation awaiting possible diagnosis of infection with methicillin-resistant *Staphylococcus aureus*(MRSA)?

a. Client admitted from a nursing home with furuncles and folliculitis

b. Client with a leg cut and other trauma from a motorcycle crash

c. Client with a rash noticed after participating in sporting events

d. Client transferred from intensive care with an elevated white blood cell count

ANS: A

The client in long-term care and other communal environments is at high risk for MRSA. The presence of furuncles and folliculitis is also an indication that MRSA may be present. A client with an open wound from a motorcycle crash would have the potential to develop MRSA, but no signs are visible at present. The rash following participation in a sporting event could be caused by several different things. A client with an elevated white blood cell count has the potential for infection but should be at lower risk for MRSA than the client admitted from the communal environment.

DIF: Applying/Application REF: 466

KEY: Transmission-Based Precautions| infection

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. After teaching a client how to care for a furuncle in the axilla, a nurse assesses the clients understanding. Which statement indicates the client correctly understands the teaching?

a. Ill apply cortisone cream to reduce the inflammation.

b. Ill apply a clean dressing after squeezing out the pus.

c. Ill keep my arm down at my side to prevent spread.

d. Ill cleanse the area prior to applying antibiotic cream.

ANS: D

Cleansing and topical antibiotics can eliminate the infection. Warm compresses enhance comfort and open the lesion, allowing better penetration of the topical antibiotic. Cortisone cream reduces the inflammatory response but increases the infectious process. Squeezing the lesion may introduce infection to deeper tissues and cause cellulitis. Keeping the arm down increases moisture in the area and promotes bacterial growth.

DIF: Applying/Application REF: 465

KEY: Skin lesions/wounds MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

11. A nurse assesses an older client who is scratching and rubbing white ridges on the skin between the fingers

and on the wrists. Which action should the nurse take?

a. Place the client in a single room.

b. Administer an antihistamine.

c. Assess the clients airway.

d. Apply gloves to minimize friction.

ANS: A

The clients presentation is most likely to be scabies, a contagious mite infestation. The client needs to be admitted to a single room and treated for the infestation. Secondary interventions may include medication to decrease the itching. This is not an allergic manifestation; therefore, antihistamine and airway assessments are not indicated. Gloves may decrease skin breakdown but would not address the clients infectious disorder.

DIF: Applying/Application REF: 469

KEY: Skin lesions/wounds| infection| Transmission-Based Precautions

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. A nurse assesses a client who has a chronic wound. The client states, I do not clean the wound and change the dressing every day because it costs too much for supplies. How should the nurse respond?

a. You can use tap water instead of sterile saline to clean your wound.

b. If you dont clean the wound properly, you could end up in the hospital.

c. Sterile procedure is necessary to keep this wound from getting infected.

d. Good hand hygiene is the only thing that really matters with wound care.

ANS: A

For chronic wounds in the home, clean tap water and nonsterile supplies are acceptable and serve as cheaper alternatives to sterile supplies. Of course, if the wound becomes grossly infected, the client may end up in the hospital, but this response does not provide any helpful information. Good handwashing is important, but it is not the only consideration.

DIF: Understanding/Comprehension REF: 464

KEY: Skin lesions/wounds| case management

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. After teaching a client who has psoriasis, a nurse assesses the clients understanding. Which statement indicates the client needs additional teaching?

a. At the next family reunion, Im going to ask my relatives if they have psoriasis.

b. I have to make sure I keep my lesions covered, so I do not spread this to others.

c. I expect that these patches will get smaller when I lie out in the sun.

d. I should continue to use the cortisone ointment as the patches shrink and dry out.

ANS: B

Psoriasis is not a contagious disorder. The client does not have to worry about spreading the condition to others. It is a condition that has hereditary links, the patches will decrease in size with ultraviolet light exposure, and cortisone ointment should be applied directly to lesions to suppress cell division.

DIF: Applying/Application REF: 471

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

14. A nurse performs a skin screening for a client who has numerous skin lesions. Which lesion does the nurse evaluate first?

a. Beige freckles on the backs of both hands

b. Irregular blue mole with white specks on the lower leg

c. Large cluster of pustules in the right axilla

d. Thick, reddened papules covered by white scales

ANS: B

This mole fits two of the criteria for being cancerous or precancerous: variation of color within one lesion, and an indistinct or irregular border. Melanoma is an invasive malignant disease with the potential for a fatal outcome. Freckles are a benign condition. Pustules could mean an infection, but it is more important to take care of the potentially cancerous lesion first. Psoriasis vulgaris manifests as thick reddened papules covered by white scales. This is a chronic disorder and is not the priority.

DIF: Applying/Application REF: 475

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Health Promotion and Maintenance

15. A nurse cares for a client who is prescribed vancomycin (Vancocin) 500 mg IV every 6 hours for a methicillin-resistant *Staphylococcus aureus* (MRSA) infection. Which action should the nurse take?

a. Administer it over 30 minutes using an IV pump.

b. Give the client diphenhydramine (Benadryl) before the drug.

c. Assess the IV site at least every 2 hours for thrombophlebitis.

d. Ensure that the client has increased oral intake during therapy.

ANS: C

Vancomycin is very irritating to the veins and can easily cause thrombophlebitis. This drug is given over at least 60 minutes; although it can cause histamine release (leading to red man syndrome), it is not customary to administer diphenhydramine before starting the infusion. Increasing oral intake is not specific to vancomycin therapy.

DIF: Applying/Application REF: 466

KEY: Infection| antibiotic| medication administration

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A nurse assesses a young female client who is prescribed isotretinoin (Accutane). Which question should the nurse ask prior to starting this therapy?

a. Do you spend a great deal of time in the sun?

b. Have you or any family members ever had skin cancer?

c. Which method of contraception are you using?

d. Do you drink alcoholic beverages?

ANS: C

Isotretinoin has many side effects. It is a known teratogen and can cause severe birth defects. A pregnancy test is required before therapy is initiated, and strict birth control measures must be used during therapy. Sun exposure, alcohol ingestion, and family history of cancer are contraindications for isotretinoin.

DIF: Applying/Application REF: 472

KEY: Medication administration

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

17. A nurse cares for clients who have various skin infections. Which infection is paired with the correct pharmacologic treatment?

a. Viral infection Clindamycin (Cleocin)

b. Bacterial infection Acyclovir (Zovirax)

c. Yeast infection Linezolid (Zyvox)

d. Fungal infection Ketoconazole (Nizoral)

ANS: D

Ketoconazole is an antifungal. Clindamycin and linezolid are antibiotics. Acyclovir is an antiviral drug.

DIF: Remembering/Knowledge REF: 468

KEY: Medication| infection

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

18. A nurse prepares to discharge a client who has a wound and is prescribed home health care. Which information should the nurse include in the hand-off report to the home health nurse?

a. Recent wound assessment, including size and appearance

b. Insurance information for billing and coding purposes

c. Complete health history and physical assessment findings

d. Resources available to the client for wound care supplies

ANS: A

The hospital nurse should provide details about the wound, including size and appearance and any special wound needs, in a hand-off report to the home health nurse. Insurance information is important to the home health agency and manager, but this is not appropriate during this hand-off report. The nurse should report focused assessment findings instead of a complete health history and physical assessment. The home health nurse should work with the client to identify community resources.

DIF: Understanding/Comprehension REF: 464

KEY: Hand-off communication| skin lesions/wounds

MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nurse assesses a client who has psoriasis. Which action should the nurse take first?

a. Don gloves and an isolation gown.

b. Shake the clients hand and introduce self.

c. Assess for signs and symptoms of infections.

d. Ask the client if she might be pregnant.

ANS: B

Clients with psoriatic lesions are often self-conscious of their skin. The nurse should first provide direct contact and touch without gloves to establish a good report with the client. Psoriasis is not an infectious disease, nor is it contagious. The nurse would not need to wear gloves or an isolation gown. Obtaining a health history and assessing for an infection and pregnancy should be completed after establishing a report with the client.

DIF: Applying/Application REF: 473

KEY: Skin lesions/wounds| patient-centered care

MSC: Integrated Process: Caring

NOT: Client Needs Category: Psychosocial Integrity

20. A nurse assesses a wife who is caring for her husband. She has a Braden Scale score of 9. Which question should the nurse include in this assessment?

a. Do you have a bedpan at home?

b. How are you coping with providing this care?

c. What are you doing to prevent pediculosis?

d. Are you sharing a bed with your husband?

ANS: B

A client with a Braden Scale score of 9 is at high risk for skin breakdown and requires moderate to maximum assistance to prevent further breakdown. Family members who care for clients at home may experience a disruption in family routines and added stress. The nurse should assess the wifes feelings and provide support for coping with changes. Asking about the clients toileting practices, prevention of pediculosis, and sleeping arrangements do not provide information about the caregivers support and coping mechanisms and ability to continue to care for her husband.

DIF: Applying/Application REF: 454

KEY: Skin breakdown| Braden Scale| coping

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Psychosocial Integrity

21. A nurse assesses a client who has a lesion on the skin that is suspicious for skin cancer, as shown below:

Which diagnostic test should the nurse anticipate being ordered for this client?

a. Punch skin biopsy

b. Viral cultures

c. Woods lamp examination

d. Diascopy

ANS: A

This lesion is suspicious for skin cancer and a biopsy is needed. A viral culture would not be appropriate. A Woods lamp examination is used to determine if skin lesions have characteristic color changes. Diascopy eliminates erythema, making skin lesions easier to examine.

DIF: Applying/Application REF: 474

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

22. A nurse evaluates the following data in a clients chart:

Admission Note	**Laboratory Results**	**Wound Care Note**
66-year-old male with a health history of a cerebral vascular accident and left-side paralysis	White blood cell count: 8000/mm^3 Prealbumin: 15.2 mg/dL Albumin: 4.2 mg/dL Lymphocyte count: 2000/mm^3	Sacral ulcer 4 cm 2 cm 1.5 cm

Based on this information, which action should the nurse take?

a. Perform a neuromuscular assessment.

b. Request a dietary consult.

c. Initiate Contact Precautions.

d. Assess the clients vital signs.

ANS: B

The white blood cell count is not directly related to nutritional status. Albumin, prealbumin, and lymphocyte counts all give information related to nutritional status. The prealbumin count is a more specific indicator of nutritional status than is the albumin count. The albumin and lymphocyte counts given are normal, but the prealbumin count is low. This puts the client at risk for inadequate wound healing, so the nurse should request a dietary consult. The other interventions do not address the information provided.

DIF: Analyzing/Analysis REF: 455

KEY: Skin lesions/wounds| nutrition| interdisciplinary team

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

23. A nurse evaluates the following data in a clients chart:

Admission Note	Prescriptions	Wound Care
78-year-old male with a past medical history of atrial fibrillation is admitted with a chronic leg wound	Warfarin sodium (Coumadin) Sotalol (Betapace)	Vacuum-assisted wound closure (VAC) treatment to leg wound

Based on this information, which action should the nurse take first?

a. Assess the clients vital signs and initiate continuous telemetry monitoring.

b. Contact the provider and express concerns related to the wound treatment prescribed.

c. Consult the wound care nurse to apply the VAC device.

d. Obtain a prescription for a low-fat, high-protein diet with vitamin supplements.

ANS: B

A client on anticoagulants is not a candidate for VAC because of the incidence of bleeding complications. The health care provider needs this information quickly to plan other therapy for the clients wound. The nurse should contact the wound care nurse after alternative orders for wound care are prescribed. Vital signs and telemetry monitoring is appropriate for a client who has a history of atrial fibrillation and should be implemented as routine care for this client. A low-fat, high-protein diet with vitamin supplements will provide the client with necessary nutrients for wound healing but can be implemented after wound care, vital signs, and telemetry monitoring.

DIF: Analyzing/Analysis REF: 462

KEY: Skin lesions/wounds| medications| anticoagulants

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. A nurse manages wound care for clients on a medical-surgical unit. Which client wounds are paired with the appropriate treatments? **(Select all that apply.)**

a. Client with a left heel ulcer with slight necrosis Whirlpool treatments

b. Client with an eschar-covered sacral ulcer Surgical dbridement

c. Client with a sunburn and erythema Soaking in warm water for 20 minutes

d. Client with urticaria Wet-to-dry dressing changes every 6 hours

e. Client with a sacral ulcer with purulent drainage Transparent film dressing

ANS: A, B

Necrotic tissue should be removed so that healing can take place. Whirlpool treatment can gently remove the necrosis. A wound covered with eschar most likely needs surgical dbridement. Warm water would not be recommended for a client with erythema. A wet-to-dry dressing and a transparent film dressing are not appropriate for urticaria or pressure ulcers, respectively.

DIF: Applying/Application REF: 462

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse plans care for a client who is immobile. Which interventions should the nurse include in this clients plan of care to prevent pressure sores? **(Select all that apply.)**

a. Place a small pillow between bony surfaces.

b. Elevate the head of the bed to 45 degrees.

c. Limit fluids and proteins in the diet.

d. Use a lift sheet to assist with re-positioning.

e. Re-position the client who is in a chair every 2 hours.

f. Keep the clients heels off the bed surfaces.

g. Use a rubber ring to decrease sacral pressure when up in the chair.

ANS: A, D, F

A small pillow decreases the risk for pressure between bony prominences, a lift sheet decreases friction and shear, and heels have poor circulation and are at high risk for pressure sores, so they should be kept off hard surfaces. Head-of-the-bed elevation greater than 30 degrees increases pressure on pelvic soft tissues. Fluids and proteins are important for maintaining tissue integrity. Clients should be repositioned every hour while sitting in a chair. A rubber ring impairs capillary blood flow, increasing the risk for a pressure sore.

DIF: Applying/Application REF: 453 KEY: Skin breakdown

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse prepares to admit a client who has herpes zoster. Which actions should the nurse take? **(Select all that apply.)**

a. Prepare a room for reverse isolation.

b. Assess staff for a history of or vaccination for chickenpox.

c. Check the admission orders for analgesia.

d. Choose a roommate who also is immune suppressed.

e. Ensure that gloves are available in the room.

ANS: B, C, E

Herpes zoster (shingles) is caused by reactivation of the same virus, varicella zoster, in clients who have previously had chickenpox. Anyone who has not had the disease or has not been vaccinated for it is at high risk for getting chickenpox. Herpes zoster is very painful and requires analgesia. Use of gloves and good handwashing are sufficient to prevent spread. It is best to put this client in a private room. Herpes zoster is a

disease of immune suppression, so no one who is immune-suppressed should be in the same room.

DIF: Applying/Application REF: 466

KEY: Skin lesions/wounds| infection| transmission precautions

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse cares for older adult clients in a long-term acute care facility. Which interventions should the nurse implement to prevent skin breakdown in these clients? **(Select all that apply.)**

a. Use a lift sheet when moving the client in bed.

b. Avoid tape when applying dressings.

c. Avoid whirlpool therapy.

d. Use loose dressing on all wounds.

e. Implement pressure-relieving devices.

ANS: A, B, E

Using a lift sheet will prevent shearing forces from tearing skin. Tape should be avoided so that the skin wont tear. Using pressure-relieving devices for clients who are at risk for pressure ulcer formation, including older adults, is a proactive approach to prevent skin breakdown. No contraindication to using whirlpool therapy for the older client is known. Dressings should be applied as prescribed, not so loose that they do not provide required treatment, and not so tight that they decrease blood flow to tissues.

DIF: Applying/Application REF: 453 KEY: Skin breakdown

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse assesses a client who presents with an increase in psoriatic lesions. Which questions should the nurse ask to identify a possible trigger for worsening of this clients psoriatic lesions? **(Select all that apply.)**

a. Have you eaten a large amount of chocolate lately?

b. Have you been under a lot of stress lately?

c. Have you recently used a public shower?

d. Have you been out of the country recently?

e. Have you recently had any other health problems?

f. Have you changed any medications recently?

ANS: B, E, F

Systemic factors, hormonal changes, psychological stress, medications, and general health factors can aggravate psoriasis. Psoriatic lesions are not triggered by chocolate, public showers, or international travel.

DIF: Applying/Application REF: 471

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse delegates care for a client who has open skin lesions. Which statements should the nurse include when delegating this clients hygiene care to an unlicensed assistive personnel (UAP)? **(Select all that apply.)**

a. Wash your hands before touching the client.

b. Wear gloves when bathing the client.

c. Assess skin for breakdown during the bath.

d. Apply lotion to lesions while the skin is wet.

e. Use a damp cloth to scrub the lesions.

ANS: A, B

All health care providers should follow Standard Precautions when caring for clients who have any open skin areas. This includes hand hygiene and wearing gloves when in contact with the lesions. The UAP is not qualified to assess the clients skin. The other statements are not appropriate for the care of open skin lesions.

DIF: Applying/Application REF: 462

KEY: Skin lesions/wounds| delegation| hygiene| unlicensed assistive personnel (UAP)

MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse cares for a client who reports pain related to eczematous dermatitis. Which nonpharmacologic comfort measures should the nurse implement? **(Select all that apply.)**

a. Cool, moist compresses

b. Topical corticosteroids

c. Heating pad

d. Tepid bath with cornstarch

e. Back rub with baby oil

ANS: A, D

For a client with eczematous dermatitis, the goal of comfort measures is to decrease inflammation and help dbride crusts and scales. The nurse should implement cool, moist compresses and tepid baths with additives such as cornstarch. Topical corticosteroids are a pharmacologic intervention. A heating pad and a back rub with baby oil are not appropriate for this client and could increase inflammation and discomfort.

DIF: Applying/Application REF: 471

KEY: Skin lesions/wounds| nonpharmacologic pain management

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

Chapter 26: Care of Patients with Burns

MULTIPLE CHOICE

1. The registered nurse assigns a client who has an open burn wound to a licensed practical nurse (LPN). Which instruction should the nurse provide to the LPN when assigning this client?

a. Administer the prescribed tetanus toxoid vaccine.

b. Assess the clients wounds for signs of infection.

c. Encourage the client to breathe deeply every hour.

d. Wash your hands on entering the clients room.

ANS: D

Infection can occur when microorganisms from another person or from the environment are transferred to the client. Although all of the interventions listed can help reduce the risk for infection, handwashing is the most effective technique for preventing infection transmission.

DIF: Applying/Application REF: 482

KEY: Infection control| Standard Precautions| collaboration

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. The nurse is caring for a client with an acute burn injury. Which action should the nurse take to prevent infection by autocontamination?

a. Use a disposable blood pressure cuff to avoid sharing with other clients.

b. Change gloves between wound care on different parts of the clients body.

c. Use the closed method of burn wound management for all wound care.

d. Advocate for proper and consistent handwashing by all members of the staff.

ANS: B

Autocontamination is the transfer of microorganisms from one area to another area of the same clients body, causing infection of a previously uninfected area. Although all techniques listed can help reduce the risk for infection, only changing gloves between performing wound care on different parts of the clients body can prevent autocontamination.

DIF: Applying/Application REF: 501

KEY: Infection control| Standard Precautions

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. The nurse teaches burn prevention to a community group. Which statement by a member of the group should cause the nurse the greatest concern?

a. I get my chimney swept every other year.

b. My hot water heater is set at 120 degrees.

c. Sometimes I wake up at night and smoke.

d. I use a space heater when it gets below zero.

ANS: C

House fires are a common occurrence and often lead to serious injury or death. The nurse should be most concerned about a person who wakes up at night and smokes. The nurse needs to question this person about whether he or she gets out of bed to do so, or if this person stays in bed, which could lead to falling back asleep with a lighted cigarette. Although it is recommended to have chimneys swept every year, skipping a year does not pose as much danger as smoking in bed, particularly if the person does not burn wood frequently. Water heaters should be set below 140 F. Space heaters should be used with caution, and the nurse may want to ensure that the person does not allow it to get near clothing or bedding.

DIF: Applying/Application REF: 488

KEY: Safety| smoking cessation MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse cares for a client who has facial burns. The client asks, Will I ever look the same? How should the nurse respond?

a. With reconstructive surgery, you can look the same.

b. We can remove the scars with the use of a pressure dressing.

c. You will not look exactly the same but cosmetic surgery will help.

d. You shouldnt start worrying about your appearance right now.

ANS: C

Many clients have unrealistic expectations of reconstructive surgery and envision an appearance identical or equal in quality to the preburn state. The nurse should provide accurate information that includes something to hope for. Pressure dressings prevent further scarring; they cannot remove scars. The client and the family should be taught the expected cosmetic outcomes.

DIF: Applying/Application REF: 504

KEY: Psychosocial response| patient education

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Psychosocial Integrity

5. A nurse assesses a client who has a burn injury. Which statement indicates the client has a positive perspective of his or her appearance?

a. I will allow my spouse to change my dressings.

b. I want to have surgical reconstruction.

c. I will bathe and dress before breakfast.

d. I have secured the pressure dressings as ordered.

ANS: C

Indicators that the client with a burn injury has a positive perception of his or her appearance include a willingness to touch the affected body part. Self-care activities such as morning care foster feelings of self-worth, which are closely linked to body image. Allowing others to change the dressing and discussing future reconstruction would not indicate a positive perception of appearance. Wearing the dressing will assist in decreasing complications but will not enhance self-perception.

DIF: Applying/Application REF: 504

KEY: Psychosocial response| coping

MSC: Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Psychosocial Integrity

6. The nurse assesses a client who has a severe burn injury. Which statement indicates the client understands the psychosocial impact of a severe burn injury?

a. It is normal to feel some depression.

b. I will go back to work immediately.

c. I will not feel anger about my situation.

d. Once I get home, things will be normal.

ANS: A

During the recovery period, and for some time after discharge from the hospital, clients with severe burn injuries are likely to have psychological problems that require intervention. Depression is one of these problems. Grief, loss, anxiety, anger, fear, and guilt are all normal feelings that can occur. Clients need to know that problems of physical care and psychological stresses may be overwhelming.

DIF: Applying/Application REF: 505

KEY: Psychosocial response| coping

MSC: Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Psychosocial Integrity

7. An emergency room nurse assesses a client who was rescued from a home fire. The client suddenly develops a loud, brassy cough. Which action should the nurse take first?

a. Apply oxygen and continuous pulse oximetry.

b. Provide small quantities of ice chips and sips of water.

c. Request a prescription for an antitussive medication.

d. Ask the respiratory therapist to provide humidified air.

ANS: A

Brassy cough and wheezing are some of the signs seen with inhalation injury. The first action by the nurse is to give the client oxygen. Clients with possible inhalation injury also need continuous pulse oximetry. Ice chips and humidified room air will not help the problem, and antitussives are not warranted.

DIF: Applying/Application REF: 490

KEY: Respiratory distress/failure

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse prepares to administer intravenous cimetidine (Tagamet) to a client who has a new burn injury. The client asks, Why am I taking this medication? How should the nurse respond?

a. Tagamet stimulates intestinal movement so you can eat more.

b. It improves fluid retention, which helps prevent hypovolemic shock.

c. It helps prevent stomach ulcers, which are common after burns.

d. Tagamet protects the kidney from damage caused by dehydration.

ANS: C

Ulcerative gastrointestinal disease (Curlings ulcer) may develop within 24 hours after a severe burn as a result of increased hydrochloric acid production and a decreased mucosal barrier. This process occurs because of the sympathetic nervous system stress response. Cimetidine is a histamine$_2$ blocker and inhibits the production and release of hydrochloric acid. Cimetidine does not affect intestinal movement and does not prevent

hypovolemic shock or kidney damage.

DIF: Applying/Application REF: 486

KEY: Medication| patient education| peptic ulcer disease prophylaxis

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A nurse cares for a client with a burn injury who presents with drooling and difficulty swallowing. Which action should the nurse take first?

a. Assess the level of consciousness and pupillary reactions.

b. Ascertain the time food or liquid was last consumed.

c. Auscultate breath sounds over the trachea and bronchi.

d. Measure abdominal girth and auscultate bowel sounds.

ANS: C

Inhalation injuries are present in 7% of clients admitted to burn centers. Drooling and difficulty swallowing can mean that the client is about to lose his or her airway because of this injury. Absence of breath sounds over the trachea and bronchi indicates impending airway obstruction and demands immediate intubation. Knowing the level of consciousness is important in assessing oxygenation to the brain. Ascertaining the time of last food intake is important in case intubation is necessary (the nurse will be more alert for signs of aspiration). However, assessing for air exchange is the most important intervention at this time. Measuring abdominal girth is not relevant in this situation.

DIF: Applying/Application REF: 490

KEY: Medical emergency| respiratory distress/failure

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse receives new prescriptions for a client with severe burn injuries who is receiving fluid resuscitation per the Parkland formula. The clients urine output continues to range from 0.2 to 0.25 mL/kg/hr. Which prescription should the nurse question?

a. Increase intravenous fluids by 100 mL/hr.

b. Administer furosemide (Lasix) 40 mg IV push.

c. Continue to monitor urine output hourly.

d. Draw blood for serum electrolytes STAT.

ANS: B

The plan of care for a client with a burn includes fluid and electrolyte resuscitation. Furosemide would be inappropriate to administer. Postburn fluid needs are calculated initially by using a standardized formula such as the Parkland formula. However, needs vary among clients, and the final fluid volume needed is adjusted to maintain hourly urine output at 0.5 mL/kg/hr. Based on this clients inadequate urine output, fluids need to be increased, urine output needs to be monitored hourly, and electrolytes should be evaluated to ensure appropriate fluids are being infused.

DIF: Applying/Application REF: 494

KEY: Intravenous fluids| medication

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse reviews the laboratory results for a client who was burned 24 hours ago. Which laboratory result should the nurse report to the health care provider immediately?

a. Arterial pH: 7.32

b. Hematocrit: 52%

c. Serum potassium: 6.5 mEq/L

d. Serum sodium: 131 mEq/L

ANS: C

The serum potassium level is changed to the degree that serious life-threatening responses could result. With such a rapid rise in potassium level, the client is at high risk for experiencing severe cardiac dysrhythmias and death. All the other findings are abnormal but do not show the same degree of severity; they would be expected in the emergent phase after a burn injury.

DIF: Applying/Application REF: 493

KEY: Electrolyte imbalance

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. A nurse assesses a client who has burn injuries and notes crackles in bilateral lung bases, a respiratory rate of 40 breaths/min, and a productive cough with blood-tinged sputum. Which action should the nurse take next?

a. Administer furosemide (Lasix).

b. Perform chest physiotherapy.

c. Document and reassess in an hour.

d. Place the client in an upright position.

ANS: D

Pulmonary edema can result from fluid resuscitation given for burn treatment. This can occur even in a young healthy person. Placing the client in an upright position can relieve lung congestion immediately before other measures can be carried out. Although Lasix may be used to treat pulmonary edema in clients who are fluid overloaded, a client with a burn injury will lose a significant amount of fluid through the broken skin; therefore, Lasix would not be appropriate. Chest physiotherapy will not get rid of fluid.

DIF: Applying/Application REF: 491

KEY: Respiratory distress/failure

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A nurse cares for a client who has burn injuries. The clients wife asks, When will his high risk for infection decrease? How should the nurse respond?

a. When the antibiotic therapy is complete.

b. As soon as his albumin levels return to normal.

c. Once we complete the fluid resuscitation process.

d. When all of his burn wounds have closed.

ANS: D

Intact skin is a major barrier to infection and other disruptions in homeostasis. No matter how much time has passed since the burn injury, the client remains at high risk for infection as long as any area of skin is open. Although the other options are important goals in the clients recovery process, they are not as important as skin closure to decrease the clients risk for infection.

DIF: Understanding/Comprehension REF: 482

KEY: Skin lesions/wounds| infection control

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. A nurse administers topical gentamicin sulfate (Garamycin) to a clients burn injury. Which laboratory value should the nurse monitor while the client is prescribed this therapy?

a. Creatinine

b. Red blood cells

c. Sodium

d. Magnesium

ANS: A

Gentamicin is nephrotoxic, and sufficient amounts can be absorbed through burn wounds to affect kidney function. Any client receiving gentamicin by any route should have kidney function monitored. Topical gentamicin will not affect the red blood cell count or the sodium or magnesium levels.

DIF: Applying/Application REF: 502

KEY: Medication| antibiotic

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. A nurse cares for a client with burn injuries. Which intervention should the nurse implement to appropriately reduce the clients pain?

a. Administer the prescribed intravenous morphine sulfate.

b. Apply ice to skin around the burn wound for 20 minutes.

c. Administer prescribed intramuscular ketorolac (Toradol).

d. Decrease tactile stimulation near the burn injuries.

ANS: A

Drug therapy for pain management requires opioid and nonopioid analgesics. The IV route is used because of problems with absorption from the muscle and the stomach. For the client to avoid shivering, the room must be kept warm, and ice should not be used. Ice would decrease blood flow to the area. Tactile stimulation can be used for pain management.

DIF: Applying/Application REF: 496 KEY: Pain management

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A nurse cares for a client with burn injuries from a house fire. The client is not consistently oriented and reports a headache. Which action should the nurse take?

a. Increase the clients oxygen and obtain blood gases.

b. Draw blood for a carboxyhemoglobin level.

c. Increase the clients intravenous fluid rate.

d. Perform a thorough Mini-Mental State Examination.

ANS: B

These manifestations are consistent with moderated carbon monoxide poisoning. This client is at risk for carbon monoxide poisoning because he or she was in a fire in an enclosed space. The other options will not provide information related to carbon monoxide poisoning.

DIF: Applying/Application REF: 490

KEY: Medical emergency

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

17. A nurse teaches a client being treated for a full-thickness burn. Which statement should the nurse include in this clients discharge teaching?

a. You should change the batteries in your smoke detector once a year.

b. Join a program that assists burn clients to reintegration into the community.

c. I will demonstrate how to change your wound dressing for you and your family.

d. Let me tell you about the many options available to you for reconstructive surgery.

ANS: C

Teaching clients and family members to perform care tasks such as dressing changes is critical for the progressive goal toward independence for the client. All of the other options are important in the rehabilitation stage. However, dressing changes have priority.

DIF: Applying/Application REF: 505

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Health Promotion and Maintenance

18. A nurse assesses bilateral wheezes in a client with burn injuries inside the mouth. Four hours later the wheezing is no longer heard. Which action should the nurse take?

a. Document the findings and reassess in 1 hour.

b. Loosen any constrictive dressings on the chest.

c. Raise the head of the bed to a semi-Fowlers position.

d. Gather appropriate equipment and prepare for an emergency airway.

ANS: D

Clients with severe inhalation injuries may sustain such progressive obstruction that they may lose effective movement of air. When this occurs, wheezing is no longer heard, and neither are breath sounds. These clients can lose their airways very quickly, so prompt action is needed. The client requires establishment of an emergency airway. Swelling usually precludes intubation. The other options do not address this emergency situation.

DIF: Applying/Application REF: 490

KEY: Respiratory distress/failure| medical emergency

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

19. A nurse uses the rule of nines to assess a client with burn injuries to the entire back region and left arm. How should the nurse document the percentage of the clients body that sustained burns?

a. 9%

b. 18%

c. 27%

d. 36%

ANS: C

According to the rule of nines, the posterior trunk, anterior trunk, and legs each make up 18% of the total body surface. The head, neck, and arms each make up 9% of total body surface, and the perineum makes up 1%. In this case, the client received burns to the back (18%) and one arm (9%), totaling 27% of the body.

DIF: Applying/Application REF: 492

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Health Promotion and Maintenance

20. A nurse assesses a client admitted with deep partial-thickness and full-thickness burns on the face, arms, and chest. Which assessment finding should alert the nurse to a potential complication?

a. Partial pressure of arterial oxygen (PaO_2) of 80 mm Hg

b. Urine output of 20 mL/hr

c. Productive cough with white pulmonary secretions

d. Core temperature of 100.6 F (38 C)

ANS: B

A significant loss of fluid occurs with burn injuries, and fluids must be replaced to maintain hemodynamics. If fluid replacement is not adequate, the client may become hypotensive and have decreased perfusion of organs, including the brain and kidneys. A low urine output is an indication of poor kidney perfusion. The other manifestations are not complications of burn injuries.

DIF: Applying/Application REF: 495

KEY: Intravenous fluids| vascular perfusion

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

21. A nurse delegates hydrotherapy to an unlicensed assistive personnel (UAP). Which statement should the nurse include when delegating this activity?

a. Keep the water temperature constant when showering the client.

b. Assess the wound beds during the hydrotherapy treatment.

c. Apply a topical enzyme agent after bathing the client.

d. Use sterile saline to irrigate and clean the clients wounds.

ANS: A

Hydrotherapy is performed by showering the client on a special shower table. The UAP should keep the water temperature constant. This process allows the nurse to assess the wound beds, but a UAP cannot complete this act. Topical enzyme agents are not part of hydrotherapy. The irrigation does not need to be done with sterile saline.

DIF: Applying/Application REF: 498

KEY: Hygiene| delegation| skin lesions/wounds| unlicensed assistive personnel (UAP)

MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

22. A nurse reviews the following data in the chart of a client with burn injuries:

Admission Notes	Wound Assessment
36-year-old female with	Bilateral leg burns present

bilateral leg burns NKDA Health history of asthma and seasonal allergies	with a white and leather-like appearance. No blisters or bleeding present. Client rates pain 2/10 on a scale of 0-10.

Based on the data provided, how should the nurse categorize this clients injuries?

a. Partial-thickness deep

b. Partial-thickness superficial

c. Full thickness

d. Superficial

ANS: C

The characteristics of the clients wounds meet the criteria for a full-thickness injury: color that is black, brown, yellow, white, or red; no blisters; minimal pain; and firm and inelastic outer layer. Partial-thickness superficial burns appear pink to red and are painful. Partial-thickness deep burns are deep red to white and painful. Superficial burns are pink to red and are also painful.

DIF: Analyzing/Analysis REF: 483

KEY: Skin lesions/wounds

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

23. After assessing an older adult client with a burn wound, the nurse documents the findings as follows:

Vital Signs	**Laboratory Results**	**Wound Assessment**
Heart rate: 110 beats/min Blood pressure: 112/68 mm Hg Respiratory rate: 20	Red blood cell count: 5,000,000/mm^3 White blood cell count: 10,000/mm^3 Platelet count: 200,000/mm^3	Left chest burn wound, 3 cm 2.5 cm 0.5 cm, wound bed pale, surrounding tissues with edema

breaths/min	present
Oxygen saturation: 94%	
Pain: 3/10	

Based on the documented data, which action should the nurse take next?

a. Assess the clients skin for signs of adequate perfusion.

b. Calculate intake and output ratio for the last 24 hours.

c. Prepare to obtain blood and wound cultures.

d. Place the client in an isolation room.

ANS: C

Older clients have a decreased immune response, so they may not exhibit signs that their immune system is actively fighting an infection, such as fever or an increased white blood cell count. They also are at higher risk for sepsis arising from a localized wound infection. The burn wound shows signs of local infection, so the nurse should assess for this and for systemic infection before the client manifests sepsis. Placing the client in an isolation room, calculating intake and output, and assessing the clients skin should all be implemented but these actions do not take priority over determining whether the client has an infection.

DIF: Analyzing/Analysis REF: 490

KEY: Infection control| Standard Precautions

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse cares for a client with burn injuries during the resuscitation phase. Which actions are priorities during this phase? **(Select all that apply.)**

a. Administer analgesics.

b. Prevent wound infections.

c. Provide fluid replacement.

d. Decrease core temperature.

e. Initiate physical therapy.

ANS: A, B, C

Nursing priorities during the resuscitation phase include securing the airway, supporting circulation and organ perfusion by fluid replacement, keeping the client comfortable with analgesics, preventing infection through careful wound care, maintaining body temperature, and providing emotional support. Physical therapy is inappropriate during the resuscitation phase but may be initiated after the client has been stabilized.

DIF: Applying/Application REF: 489

KEY: Skin lesions/wounds| pharmacologic pain management| infection control

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse cares for a client with burn injuries who is experiencing anxiety and pain. Which nonpharmacologic comfort measures should the nurse implement? **(Select all that apply.)**

a. Music as a distraction

b. Tactile stimulation

c. Massage to injury sites

d. Cold compresses

e. Increasing client control

ANS: A, B, E

Nonpharmacologic comfort measures for clients with burn injuries include music therapy, tactile stimulation, massaging unburned areas, warm compresses, and increasing client control.

DIF: Remembering/Knowledge REF: 496

KEY: Nonpharmacologic pain management

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse plans care for a client with burn injuries. Which interventions should the nurse include in this clients plan of care to ensure adequate nutrition? **(Select all that apply.)**

a. Provide at least 5000 kcal/day.

b. Start an oral diet on the first day.

c. Administer a diet high in protein.

d. Collaborate with a registered dietitian.

e. Offer frequent high-calorie snacks.

ANS: A, C, D, E

A client with a burn injury needs a high-calorie diet, including at least 5000 kcal/day and frequent high-calorie snacks. The nurse should collaborate with a registered dietitian to ensure the client receives a high-calorie and high-protein diet required for wound healing. Oral diet therapy should be delayed until GI motility resumes.

DIF: Remembering/Knowledge REF: 501

KEY: Nutrition| nutritional requirements

MSC: Integrated Process: Nursing Process: Planning

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A nurse cares for an older client with burn injuries. Which age-related changes are paired appropriately with their complications from the burn injuries? **(Select all that apply.)**

a. Slower healing time Increased risk for loss of function from contracture formation

b. Reduced inflammatory response Deep partial-thickness wound with minimal exposure

c. Reduced thoracic compliance Increased risk for atelectasis

d. High incidence of cardiac impairments Increased risk for acute kidney injury

e. Thinner skin May not exhibit a fever when infection is present

ANS: A, C, D

Slower healing time will place the older adult client at risk for loss of function from contracture formation due to the length of time needed for the client to heal. A pre-existing cardiac impairment increases risk for acute kidney injury from decreased renal blood flow, and reduced thoracic compliance places the client at risk for atelectasis. Reduced inflammatory response places the client at risk for infection without a normal response, including fever. Clients with thinned skin are at greater risk for deeper wounds from minimal exposure.

DIF: Remembering/Knowledge REF: 490 KEY: Older adult

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse plans care for a client with burn injuries. Which interventions should the nurse implement to prevent infection in the client? **(Select all that apply.)**

a. Ask all family members and visitors to perform hand hygiene before touching the client.

b. Carefully monitor burn wounds when providing each dressing change.

c. Clean equipment with alcohol between uses with each client on the unit.

d. Allow family members to only bring the client plants from the hospitals gift shop.

e. Use aseptic technique and wear gloves when performing wound care.

ANS: A, B, E

To prevent infection in a client with burn injuries the nurse should ensure everyone performs hand hygiene, monitor wounds for signs of infection, and use aseptic technique, including wearing gloves when performing wound care. The client should have disposable equipment that is not shared with another client, and plants should not be allowed in the clients room.

DIF: Applying/Application REF: 499

KEY: Infection control| Standard Precautions| Transmission-Based Precautions

MSC: Integrated Process: Nursing Process: Planning

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

SHORT ANSWER

1. An emergency room nurse cares for a client admitted with a 50% burn injury at 10:00 this morning. The client weighs 90 kg. Using the Parkland formula, calculate the rate at which the nurse should infuse intravenous fluid resuscitation when started at noon. (*Record your answer using a whole number.*) _____ mL/hr

ANS:

1500 mL/hr

The Parkland formula is 4 mL/kg/% total body surface area burn. This client needs 18,000 mL of fluid during the first 24 hours postburn. Half of the calculated fluid replacement needs to be administered during the first 8 hours after injury, and half during the next 16 hours. This client was burned at 10:00 AM, and fluid was not started until noon. Therefore, 9000 mL must be infused over the next 6 hours at a rate of 1500 mL/hr to meet the criteria of receiving half the calculated dose during the first 8 postburn hours.

DIF: Applying/Application REF: 494

KEY: Medication calculation

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. An emergency room nurse implements fluid replacement for a client with severe burn injuries. The provider prescribes a liter of 0.9% normal saline to infuse over 1 hour and 30 minutes via gravity tubing with a drip factor of 30 drops/mL. At what rate should the nurse administer the infusion? (*Record your answer using a whole number and rounding to the nearest drop.*) ____ drops/min

ANS:

333 drops/min

1000 mL divided by 90 minutes, then multiplied by 30 drops, equals 333 drops/min.

DIF: Applying/Application REF: 494

KEY: Medication calculation

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 27: Assessment of the Respiratory System

MULTIPLE CHOICE

1. A nurse obtains the health history of a client who is recently diagnosed with lung cancer and identifies that the client has a 60pack-year smoking history. Which action is most important for the nurse to take when interviewing this client?
a. Tell the client that he needs to quit smoking to stop further cancer development.
b. Encourage the client to be completely honest about both tobacco and marijuana use.
c. Maintain a nonjudgmental attitude to avoid causing the client to feel guilty.
d. Avoid giving the client false hope regarding cancer treatment and prognosis.

ANS: C
Smoking history includes the use of cigarettes, cigars, pipe tobacco, marijuana, and other controlled substances. Because the client may have guilt or denial about this habit, assume a nonjudgmental attitude during the interview. This will encourage the client to be honest about the exposure. Ask the client whether any of these substances are used now or were used in the past. Assess whether the client has passive exposure to smoke in the home or workplace. If the client smokes, ask for how long, how many packs per day, and whether he or she has quit smoking (and how long ago). Document the smoking history in pack-years (number of packs smoked daily multiplied by the number of years the client has smoked). Quitting smoking may not stop further cancer development. This statement would be giving the client false hope, which should be avoided, but is not as important as maintaining a nonjudgmental attitude.

DIF: Applying/Application REF: 508
KEY: Patient-centered care| smoking cessation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse assesses a client after an open lung biopsy. Which assessment finding is matched with the correct intervention?
a. Client states he is dizzy. Nurse applies oxygen and pulse oximetry.
b. Clients heart rate is 55 beats/min. Nurse withholds pain medication.
c. Client has reduced breath sounds. Nurse calls physician immediately.
d. Clients respiratory rate is 18 breaths/min. Nurse decreases oxygen flow rate.

ANS: C
A potentially serious complication after biopsy is pneumothorax, which is indicated by decreased or absent breath sounds. The physician needs to be notified immediately. Dizziness after the procedure is not an expected finding. If the clients heart rate is 55 beats/min, no reason is known to withhold pain medication. A respiratory rate of 18 breaths/min is a normal finding and would not warrant changing the oxygen flow rate.

DIF: Applying/Application REF: 526
KEY: Assessment/diagnostic examination| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaption

3. A nurse assesses a clients respiratory status. Which information is of highest priority for the nurse to obtain?
a. Average daily fluid intake
b. Neck circumference
c. Height and weight
d. Occupation and hobbies

ANS: D
Many respiratory problems occur as a result of chronic exposure to inhalation irritants used in a clients occupation and hobbies. Although it will be important for the nurse to assess the clients fluid intake, height, and weight, these will not be as important as determining his occupation and hobbies. Determining the clients neck circumference will not be an important part of a respiratory assessment.

DIF: Applying/Application REF: 510
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse is caring for an older adult client who has a pulmonary infection. Which action should the nurse take first?
a. Encourage the client to increase fluid intake.
b. Assess the clients level of consciousness.
c. Raise the head of the bed to at least 45 degrees.
d. Provide the client with humidified oxygen.

ANS: B
Assessing the clients level of consciousness will be most important because it will show how the client is responding to the presence of the infection. Although it will be important for the nurse to encourage the client to turn, cough, and frequently breathe deeply; raise the head of the bed; increase oral fluid intake; and humidify the oxygen administered, none of these actions will be as important as assessing the level of consciousness. Also, the client who has a pulmonary infection may not be able to cough effectively if an area of abscess is present.

DIF: Applying/Application REF: 515
KEY: Older adult| pulmonary infection
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse is providing care after auscultating clients breath sounds. Which assessment finding is correctly matched to the nurses primary intervention?
a. Hollow sounds are heard over the trachea. The nurse increases the oxygen flow rate.
b. Crackles are heard in bases. The nurse encourages the client to cough forcefully.
c. Wheezes are heard in central areas. The nurse administers an inhaled bronchodilator.
d. Vesicular sounds are heard over the periphery. The nurse has the client breathe deeply.

ANS: C
Wheezes are indicative of narrowed airways, and bronchodilators help to open the air passages. Hollow sounds are typically heard over the trachea, and no intervention is necessary. If crackles are heard, the client may need a diuretic. Crackles represent a deep interstitial process, and coughing forcefully will not help the client expectorate secretions. Vesicular sounds heard in the periphery are normal and require no intervention.

DIF: Applying/Application REF: 520
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse observes that a clients anteroposterior (AP) chest diameter is the same as the lateral chest diameter. Which question should the nurse ask the client in response to this finding?
a. Are you taking any medications or herbal supplements?
b. Do you have any chronic breathing problems?
c. How often do you perform aerobic exercise?
d. What is your occupation and what are your hobbies?

ANS: B
The normal chest has a lateral diameter that is twice as large as the AP diameter. When the AP diameter approaches or exceeds the lateral diameter, the client is said to have a barrel chest. Most commonly, barrel chest occurs as a result of a long-term chronic airflow limitation problem, such as chronic obstructive pulmonary disease or severe chronic asthma. It can also be seen in people who have lived at a high altitude for many years. Therefore, an AP chest diameter that is the same as the lateral chest diameter should be rechecked but is not as indicative of underlying disease processes as an AP diameter that exceeds the lateral diameter. Medications, herbal supplements, and aerobic exercise are not associated with a barrel chest. Although occupation and hobbies may expose a client to irritants that can cause chronic lung disorders and barrel chest,

asking about chronic breathing problems is more direct and should be asked first.

DIF: Applying/Application REF: 517
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse is assessing a client who is recovering from a lung biopsy. Which assessment finding requires immediate action?
a. Increased temperature
b. Absent breath sounds
c. Productive cough
d. Incisional discomfort

ANS: B
Absent breath sounds may indicate that the client has a pneumothorax, a serious complication after a needle biopsy or open lung biopsy. The other manifestations are not life threatening.

DIF: Applying/Application REF: 526
KEY: Assessment/diagnostic examination| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse is caring for a client who is scheduled to undergo a thoracentesis. Which intervention should the nurse complete prior to the procedure?
a. Measure oxygen saturation before and after a 12-minute walk.
b. Verify that the client understands all possible complications.
c. Explain the procedure in detail to the client and the family.
d. Validate that informed consent has been given by the client.

ANS: D
A thoracentesis is an invasive procedure with many potentially serious complications. Verifying that the client understands complications and explaining the procedure to be performed will be done by the physician or nurse practitioner, not the nurse. Measurement of oxygen saturation before and after a 12-minute walk is not a procedure unique to a thoracentesis.

DIF: Applying/Application REF: 525
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse assesses a client after a thoracentesis. Which assessment finding warrants immediate action?
a. The client rates pain as a 5/10 at the site of the procedure.
b. A small amount of drainage from the site is noted.
c. Pulse oximetry is 93% on 2 liters of oxygen.
d. The trachea is deviated toward the opposite side of the neck.

ANS: D
A deviated trachea is a manifestation of a tension pneumothorax, which is a medical emergency. The other findings are normal or near normal.

DIF: Applying/Application REF: 525
KEY: Assessment/diagnostic examination| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A nurse cares for a client who had a bronchoscopy 2 hours ago. The client asks for a drink of water. Which action should the nurse take next?
a. Call the physician and request a prescription for food and water.

b. Provide the client with ice chips instead of a drink of water.
c. Assess the clients gag reflex before giving any food or water.
d. Let the client have a small sip to see whether he or she can swallow.

ANS: C
The topical anesthetic used during the procedure will have affected the clients gag reflex. Before allowing the client anything to eat or drink, the nurse must check for the return of this reflex.

DIF: Applying/Application REF: 525
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. A nurse plans care for a client who is experiencing dyspnea and must stop multiple times when climbing a flight of stairs. Which intervention should the nurse include in this clients plan of care?
a. Assistance with activities of daily living
b. Physical therapy activities every day
c. Oxygen therapy at 2 liters per nasal cannula
d. Complete bedrest with frequent repositioning

ANS: A
A client with dyspnea and difficulty completing activities such as climbing a flight of stairs has class III dyspnea. The nurse should provide assistance with activities of daily living. These clients should be encouraged to participate in activities as tolerated. They should not be on complete bedrest, may not be able to tolerate daily physical therapy, and only need oxygen if hypoxia is present.

DIF: Applying/Application REF: 517
KEY: Respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

12. A nurse teaches a client who is prescribed nicotine replacement therapy. Which statement should the nurse include in this clients teaching?
a. Make a list of reasons why smoking is a bad habit.
b. Rise slowly when getting out of bed in the morning.
c. Smoking while taking this medication will increase your risk of a stroke.
d. Stopping this medication suddenly increases your risk for a heart attack.

ANS: C
Clients who smoke while using drugs for nicotine replacement therapy increase the risk of stroke and heart attack. Nurses should teach clients not to smoke while taking this drug. The other responses are inappropriate.

DIF: Applying/Application REF: 509
KEY: Smoking cessation| medication MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse is caring for a client who received benzocaine spray prior to a recent bronchoscopy. The client presents with continuous cyanosis even with oxygen therapy. Which action should the nurse take next?
a. Administer an albuterol treatment.
b. Notify the Rapid Response Team.
c. Assess the clients peripheral pulses.
d. Obtain blood and sputum cultures.

ANS: B
Cyanosis unresponsive to oxygen therapy is a manifestation of methemoglobinemia, which is an adverse effect of benzocaine spray. Death can occur if the level of methemoglobin rises and cyanosis occurs. The nurse should notify the Rapid Response Team to provide advanced nursing care. An albuterol treatment would not address the clients oxygenation problem. Assessment of pulses and cultures will not provide data necessary to treat this client.

DIF: Applying/Application REF: 524
KEY: Assessment/diagnostic examination| medication
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14. A nurse auscultates a harsh hollow sound over a clients trachea and larynx. Which action should the nurse take first?
a. Document the findings.
b. Administer oxygen therapy.
c. Position the client in high-Fowlers position.
d. Administer prescribed albuterol.

ANS: A
Bronchial breath sounds, including harsh, hollow, tubular, and blowing sounds, are a normal finding over the trachea and larynx. The nurse should document this finding. There is no need to implement oxygen therapy, administer albuterol, or change the clients position because the finding is normal.

DIF: Remembering/Knowledge REF: 520
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. A nurse assesses a client who is prescribed varenicline (Chantix) for smoking cessation. Which manifestations should the nurse identify as adverse effects of this medication? (Select all that apply.)
a. Visual hallucinations
b. Tachycardia
c. Decreased cravings
d. Impaired judgment
e. Increased thirst

ANS: A, D
Varenicline (Chantix) has a black box warning stating that the drug can cause manic behavior and hallucinations. The nurse should assess for changes in behavior and thought processes, including impaired judgment and visual hallucinations. Tachycardia and increased thirst are not adverse effects of this medication. Decreased cravings is a therapeutic response to this medication.

DIF: Understanding/Comprehension REF: 510
KEY: Medication| smoking cessation
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse plans care for a client who is at high risk for a pulmonary infection. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Encourage deep breathing and coughing.
b. Implement an air mattress overlay.
c. Ambulate the client three times each day.
d. Provide a diet high in protein and vitamins.
e. Administer acetaminophen (Tylenol) twice daily.

ANS: A, C, D
Regular pulmonary hygiene and activities to maintain health and fitness help to maximize functioning of the respiratory system and prevent infection. A client at high risk for a pulmonary infection may need a specialty bed to help with postural drainage or percussion; this would not include an air mattress overlay, which is used to prevent pressure ulcers. Tylenol would not decrease the risk of a pulmonary infection.

DIF: Applying/Application REF: 515
KEY: Respiratory distress/failure

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. While obtaining a clients health history, the client states, I am allergic to avocados. Which responses by the nurse are best? (Select all that apply.)
a. What response do you have when you eat avocados?
b. I will remove any avocados that are on your lunch tray.
c. When was the last time you ate foods containing avocados?
d. I will document this in your record so all of your providers will know.
e. Have you ever been treated for this allergic reaction?

ANS: A, D, E
Nurses should assess clients who have allergies for the specific cause, treatment, and response to treatment. The nurse should also document the allergies in a prominent place in the clients medical record. The nurse should collaborate with food services to ensure no avocados are placed on the clients meal trays. Asking about the last time the client ate avocados does not provide any pertinent information for the clients plan of care.

DIF: Applying/Application REF: 516
KEY: Allergies/allergic response
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse collaborates with a respiratory therapist to complete pulmonary function tests (PFTs) for a client. Which statements should the nurse include in communications with the respiratory therapist prior to the tests? (Select all that apply.)
a. I held the clients morning bronchodilator medication.
b. The client is ready to go down to radiology for this examination.
c. Physical therapy states the client can run on a treadmill.
d. I advised the client not to smoke for 6 hours prior to the test.
e. The client is alert and can follow your commands.

ANS: A, D, E
To ensure the PFTs are accurate, the therapist needs to know that no bronchodilators have been administered in the past 4 to 6 hours, the client did not smoke within 6 to 8 hours prior to the test, and the client can follow basic commands, including different breathing maneuvers. The respiratory therapist can perform PFTs at the bedside. A treadmill is not used for this test.

DIF: Applying/Application REF: 523
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse teaches a client who is interested in smoking cessation. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. Find an activity that you enjoy and will keep your hands busy.
b. Keep snacks like potato chips on hand to nibble on.
c. Identify a punishment for yourself in case you backslide.
d. Drink at least eight glasses of water each day.
e. Make a list of reasons you want to stop smoking.

ANS: A, D, E
The nurse should teach a client who is interested in smoking cessation to find an activity that keeps the hands busy, to keep healthy snacks on hand to nibble on, to drink at least 8 glasses of water each day, and to make a list of reasons for quitting smoking. The nurse should also encourage the client not to be upset if he or she backslides and has a cigarette.

DIF: Applying/Application REF: 510
KEY: Smoking cessation| patient-centered care
MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

SHORT ANSWER

1. A nurse assesses a 66-year-old client who is attempting to quit smoking. The client states, I started smoking at age 16, and smoked one pack each day until 10 years ago. Then I decreased to a half of a pack per day. How many pack-years should the nurse document for this client? (Record your answer using a whole number.) ___ pack-years

ANS:
45 pack-years
66 (current age) 16 (year started smoking) = 50 years of smoking.
(40 years 1 pack per day) + (10 years 0.5 pack per day) = 45 pack-years.

DIF: Applying/Application REF: 509
KEY: Smoking cessation
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 28: Care of Patients Requiring Oxygen Therapy or Tracheostomy

MULTIPLE CHOICE

1. A nursing student caring for a client removes the clients oxygen as prescribed. The client is now breathing what percentage of oxygen in the room air?
a. 14%
b. 21%
c. 28%
d. 31%

ANS: B
Room air is 21% oxygen.

DIF: Remembering/Knowledge REF: 529
KEY: Oxygen| physiology
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A client is scheduled to have a tracheostomy placed in an hour. What action by the nurse is the priority?
a. Administer prescribed anxiolytic medication.
b. Ensure informed consent is on the chart.
c. Reinforce any teaching done previously.
d. Start the preoperative antibiotic infusion.

ANS: B
Since this is an operative procedure, the client must sign an informed consent, which must be on the chart. Giving anxiolytics and antibiotics and reinforcing teaching may also be required but do not take priority.

DIF: Applying/Application REF: 537
KEY: Informed consent| autonomy
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A client has a tracheostomy that is 3 days old. Upon assessment, the nurse notes the clients face is puffy and the eyelids are swollen. What action by the nurse takes priority?
a. Assess the clients oxygen saturation.
b. Notify the Rapid Response Team.
c. Oxygenate the client with a bag-valve-mask.
d. Palpate the skin of the upper chest.

ANS: A
This client may have subcutaneous emphysema, which is air that leaks into the tissues surrounding the tracheostomy. The nurse should first assess the clients oxygen saturation and other indicators of oxygenation. If the client is stable, the nurse can palpate the skin of the upper chest to feel for the air. If the client is unstable the nurse calls the Rapid Response Team. Using a bag-valve-mask device may or may not be appropriate for the unstable client.

DIF: Applying/Application REF: 538
KEY: Oxygenation| tracheostomy| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A client has a tracheostomy tube in place. When the nurse suctions the client, food particles are noted. What action by the nurse is best?
a. Elevate the head of the clients bed.
b. Measure and compare cuff pressures.

c. Place the client on NPO status.
d. Request that the client have a swallow study.

ANS: B
Constant pressure from the tracheostomy tube cuff can cause tracheomalacia, leading to dilation of the tracheal passage. This can be manifested by food particles seen in secretions or by noting that larger and larger amounts of pressure are needed to keep the tracheostomy cuff inflated. The nurse should measure the pressures and compare them to previous ones to detect a trend. Elevating the head of the bed, placing the client on NPO status, and requesting a swallow study will not correct this situation.

DIF: Analyzing/Analysis REF: 538
KEY: Tracheostomy| patient safety| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. An unlicensed assistive personnel (UAP) was feeding a client with a tracheostomy. Later that evening, the UAP reports that the client had a coughing spell during the meal. What action by the nurse takes priority?
a. Assess the clients lung sounds.
b. Assign a different UAP to the client.
c. Report the UAP to the manager.
d. Request thicker liquids for meals.

ANS: A
The priority is to check the clients oxygenation because he or she may have aspirated. Once the client has been assessed, the nurse can consult with the registered dietitian about appropriately thickened liquids. The UAP should have reported the incident immediately, but addressing that issue is not the immediate priority.

DIF: Applying/Application REF: 539
KEY: Delegation| aspiration| tracheostomy| nursing assessment| unlicensed assistive personnel (UAP) MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A student nurse is providing tracheostomy care. What action by the student requires intervention by the instructor?
a. Holding the device securely when changing ties
b. Suctioning the client first if secretions are present
c. Tying a square knot at the back of the neck
d. Using half-strength peroxide for cleansing

ANS: C
To prevent pressure ulcers and for client safety, when ties are used that must be knotted, the knot should be placed at the side of the clients neck, not in back. The other actions are appropriate.

DIF: Applying/Application REF: 542
KEY: Tracheostomy| tracheostomy care| patient safety| supervision
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A student is practicing suctioning a tracheostomy in the skills laboratory. What action by the student demonstrates that more teaching is needed?
a. Applying suction while inserting the catheter
b. Preoxygenating the client prior to suctioning
c. Suctioning for a total of three times if needed
d. Suctioning for only 10 to 15 seconds each time

ANS: A
Suction should only be applied while withdrawing the catheter. The other actions are appropriate.

DIF: Remembering/Knowledge REF: 540

KEY: Tracheostomy| tracheostomy care| suctioning| supervision
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse is caring for a client using oxygen while in the hospital. What assessment finding indicates that goals for a priority diagnosis are being met?
a. 100% of meals being eaten by the client
b. Intact skin behind the ears
c. The client understanding the need for oxygen
d. Unchanged weight for the past 3 days

ANS: B
Oxygen tubing can cause pressure ulcers, so clients using oxygen have the nursing diagnosis of Risk for Impaired Skin Integrity. Intact skin behind the ears indicates that goals for this diagnosis are being met. Nutrition and weight are not related to using oxygen. Understanding the need for oxygen is important but would not take priority over a physical problem.

DIF: Evaluating/Synthesis REF: 530
KEY: Oxygen| skin integrity| nursing diagnosis| oxygen therapy
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A nurse is assessing a client who has a tracheostomy. The nurse notes that the tracheostomy tube is pulsing with the heartbeat as the clients pulse is being taken. No other abnormal findings are noted. What action by the nurse is most appropriate?
a. Call the operating room to inform them of a pending emergency case.
b. No action is needed at this time; this is a normal finding in some clients.
c. Remove the tracheostomy tube; ventilate the client with a bag-valve-mask.
d. Stay with the client and have someone else call the provider immediately.

ANS: D
This client may have a tracheainnominate artery fistula, which can be a life-threatening emergency if the artery is breached and the client begins to hemorrhage. Since no bleeding is yet present, the nurse stays with the client and asks someone else to notify the provider. If the client begins hemorrhaging, the nurse removes the tracheostomy and applies pressure at the bleeding site. The client will need to be prepared for surgery.

DIF: Applying/Application REF: 538
KEY: Tracheostomy| medical emergencies| communication
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

10. A client with a new tracheostomy is being seen in the oncology clinic. What finding by the nurse best indicates that goals for the nursing diagnosis Impaired Self-Esteem are being met?
a. The client demonstrates good understanding of stoma care.
b. The client has joined a book club that meets at the library.
c. Family members take turns assisting with stoma care.
d. Skin around the stoma is intact without signs of infection.

ANS: B
The client joining a book club that meets outside the home and requires him or her to go out in public is the best sign that goals for Impaired Self-Esteem are being met. The other findings are all positive signs but do not relate to this nursing diagnosis.

DIF: Evaluating/Synthesis REF: 543
KEY: Tracheostomy| nursing evaluation| psychosocial response
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Psychosocial Integrity

11. A client is receiving oxygen at 4 liters per nasal cannula. What comfort measure may the nurse delegate to

unlicensed assistive personnel (UAP)?
a. Apply water-soluble ointment to nares and lips.
b. Periodically turn the oxygen down or off.
c. Remove the tubing from the clients nose.
d. Turn the client every 2 hours or as needed.

ANS: A
Oxygen can be drying, so the UAP can apply water-soluble lubricant to the clients lips and nares. The UAP should not adjust the oxygen flow rate or remove the tubing. Turning the client is not related to comfort measures for oxygen.

DIF: Applying/Application REF: 530
KEY: Oxygen| comfort measures| oral care| skin care| delegation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

12. A client is wearing a Venturi mask to deliver oxygen and the dinner tray has arrived. What action by the nurse is best?
a. Assess the clients oxygen saturation and, if normal, turn off the oxygen.
b. Determine if the client can switch to a nasal cannula during the meal.
c. Have the client lift the mask off the face when taking bites of food.
d. Turn the oxygen off while the client eats the meal and then restart it.

ANS: B
Oxygen is a drug that needs to be delivered constantly. The nurse should determine if the provider has approved switching to a nasal cannula during meals. If not, the nurse should consult with the provider about this issue. The oxygen should not be turned off. Lifting the mask to eat will alter the FiO2 delivered.

DIF: Applying/Application REF: 532
KEY: Oxygen therapy| oxygen
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. The nurse assesses the client using the device pictured below to deliver 50% O2:

The nurse finds the mask fits snugly, the skin under the mask and straps is intact, and the flow rate of the oxygen is 3 L/min. What action by the nurse is best?
a. Assess the clients oxygen saturation.
b. Document these findings in the chart.
c. Immediately increase the flow rate.
d. Turn the flow rate down to 2 L/min.

ANS: C
For the Venturi mask to deliver high flow of oxygen, the flow rate must be set correctly, usually between 4 and 10 L/min. The clients flow rate is too low and the nurse should increase it. After increasing the flow rate, the nurse assesses the oxygen saturation and documents the findings.

DIF: Analyzing/Analysis REF: 534
KEY: Oxygen| patient safety| oxygen therapy
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. A home health nurse is visiting a new client who uses oxygen in the home. For which factors does the nurse assess when determining if the client is using the oxygen safely? (Select all that apply.)
a. The client does not allow smoking in the house.
b. Electrical cords are in good working order.
c. Flammable liquids are stored in the garage.

d. Household light bulbs are the fluorescent type.
e. The client does not have pets inside the home.

ANS: A, B, C
Oxygen is an accelerant, which means it enhances combustion, so precautions are needed whenever using it. The nurse should assess if the client allows smoking near the oxygen, whether electrical cords are in good shape or are frayed, and if flammable liquids are stored (and used) in the garage away from the oxygen. Light bulbs and pets are not related to oxygen safety.

DIF: Understanding/Comprehension REF: 530
KEY: Patient safety| fire| oxygen| home safety| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A nurse is caring for a client who has a tracheostomy tube. What actions may the nurse delegate to unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Applying water-soluble lip balm to the clients lips
b. Ensuring the humidification provided is adequate
c. Performing oral care with alcohol-based mouthwash
d. Reminding the client to cough and deep breathe often
e. Suctioning excess secretions through the tracheostomy

ANS: A, D
The UAP can perform hygiene measures such as applying lip balm and reinforce teaching such as reminding the client to perform coughing and deep-breathing exercises. Oral care can be accomplished with normal saline, not products that dry the mouth. Ensuring the humidity is adequate and suctioning through the tracheostomy are nursing functions.

DIF: Applying/Application REF: 530
KEY: Tracheostomy| oral care| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A client is being discharged home after having a tracheostomy placed. What suggestions does the nurse offer to help the client maintain self-esteem? (Select all that apply.)
a. Create a communication system.
b. Dont go out in public alone.
c. Find hobbies to enjoy at home.
d. Try loose-fitting shirts with collars.
e. Wear fashionable scarves.

ANS: A, D, E
The client with a tracheostomy may be shy and hesitant to go out in public. The client should have a sound communication method to ease frustration. The nurse can also suggest ways of enhancing appearance so the client is willing to leave the house. These can include wearing scarves and loose-fitting shirts to hide the stoma. Keeping the client homebound is not good advice.

DIF: Understanding/Comprehension REF: 543
KEY: Tracheostomy| psychosocial response| patient education
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

4. A nurse is planning discharge teaching on tracheostomy care for an older client. What factors does the nurse need to assess before teaching this particular client? (Select all that apply.)
a. Cognition
b. Dexterity
c. Hydration
d. Range of motion
e. Vision

ANS: A, B, D, E
The older adult is at risk for having impairments in cognition, dexterity, range of motion, and vision that could limit the ability to perform tracheostomy care and should be assessed. Hydration is not directly related to the ability to perform self-care.

DIF: Understanding/Comprehension REF: 544
KEY: Older adult| tracheostomy| patient education
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse is teaching a client about possible complications and hazards of home oxygen therapy. About which complications does the nurse plan to teach the client? (Select all that apply.)
a. Absorptive atelectasis
b. Combustion
c. Dried mucous membranes
d. Oxygen-induced hyperventilation
e. Toxicity

ANS: A, B, C, E
Complications of oxygen therapy include absorptive atelectasis, combustion, dried mucous membranes, and oxygen toxicity. Oxygen-induced hypoventilation is also a complication.

DIF: Understanding/Comprehension REF: 530
KEY: Respiratory system| oxygen therapy| home safety| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 29: Care of Patients with Noninfectious Upper Respiratory Problems

MULTIPLE CHOICE

1. A nurse is assessing a client who has suffered a nasal fracture. Which assessment should the nurse perform first?
a. Facial pain
b. Vital signs
c. Bone displacement
d. Airway patency

ANS: D
A patent airway is the priority. The nurse first should make sure that the airway is patent and then should determine whether the client is in pain and whether bone displacement or blood loss has occurred.

DIF: Applying/Application REF: 547
KEY: Trauma| medical emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse assesses a client who has a nasal fracture. The client reports constant nasal drainage, a headache, and difficulty with vision. Which action should the nurse take next?
a. Collect the nasal drainage on a piece of filter paper.
b. Encourage the client to blow his or her nose.
c. Perform a test focused on a neurologic examination.
d. Palpate the nose, face, and neck.

ANS: A
The client with nasal drainage after facial trauma could have a skull fracture that has resulted in leakage of cerebrospinal fluid (CSF). CSF can be differentiated from regular drainage by the fact that it forms a halo when dripped on filter paper. The other actions would be appropriate but are not as high a priority as assessing for CSF. A CSF leak would increase the clients risk for infection.

DIF: Applying/Application REF: 548
KEY: Trauma| medical emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse assesses a client who reports waking up feeling very tired, even after 8 hours of good sleep. Which action should the nurse take first?
a. Contact the provider for a prescription for sleep medication.
b. Tell the client not to drink beverages with caffeine before bed.
c. Educate the client to sleep upright in a reclining chair.
d. Ask the client if he or she has ever been evaluated for sleep apnea.

ANS: D
Clients are usually unaware that they have sleep apnea, but it should be suspected in people who have persistent daytime sleepiness and report waking up tired. Causes of the problem should be assessed before the client is offered suggestions for treatment.

DIF: Applying/Application REF: 551
KEY: Respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A nurse teaches a client who has open vocal cord paralysis. Which technique should the nurse teach the client to prevent aspiration?

a. Tilt the head back as far as possible when swallowing.
b. Tuck the chin down when swallowing.
c. Breathe slowly and deeply while swallowing.
d. Keep the head very still and straight while swallowing.

ANS: B
The client with open vocal cord paralysis may aspirate. The nurse should teach the client to tuck in his or her chin during swallowing to prevent aspiration. Tilting the head back would increase the chance of aspiration. Breathing slowly would not decrease the risk of aspiration, but holding the breath would. Keeping the head still and straight would not decrease the risk for aspiration.

DIF: Applying/Application REF: 551
KEY: Aspiration precaution MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse assesses clients on the medical-surgical unit. Which client is at greatest risk for development of obstructive sleep apnea?
a. A 26-year-old woman who is 8 months pregnant
b. A 42-year-old man with gastroesophageal reflux disease
c. A 55-year-old woman who is 50 pounds overweight
d. A 73-year-old man with type 2 diabetes mellitus

ANS: C
The client at highest risk would be the one who is extremely overweight. None of the other clients have risk factors for sleep apnea.

DIF: Applying/Application REF: 551
KEY: Respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

6. After teaching a client who is prescribed voice rest therapy for vocal cord polyps, a nurse assesses the clients understanding. Which statement indicates the client needs further teaching?
a. I will stay away from smokers to minimize inhalation of secondhand smoke.
b. When I speak, I will whisper rather than use a normal tone of voice.
c. For the next several weeks, I will not lift more than 10 pounds.
d. I will drink at least three quarts of water each day to stay hydrated.

ANS: B
Treatment for vocal cord polyps includes no speaking, no lifting, and no smoking. The client has to be educated not to even whisper when resting the voice. It is also appropriate for the client to stay out of rooms where people are smoking, to stay hydrated, and to use stool softeners.

DIF: Applying/Application REF: 552
KEY: Cancer| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse cares for a client who is experiencing epistaxis. Which action should the nurse take first?
a. Initiate Standard Precautions.
b. Apply direct pressure.
c. Sit the client upright.
d. Loosely pack the nares with gauze.

ANS: A
The nurse should implement Standard Precautions and don gloves prior to completing the other actions.

DIF: Applying/Application REF: 548
KEY: Trauma
MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. A nurse cares for a client after radiation therapy for lung cancer. The client reports a sore throat. Which action should the nurse take first?
a. Ask the client to gargle with mouthwash containing lidocaine.
b. Administer prescribed intravenous pain medications.
c. Explain that soreness is normal and will improve in a couple days.
d. Assess the clients neck for redness and swelling.

ANS: A
Mouthwashes and throat sprays containing a local anesthetic agent such as lidocaine or diphenhydramine can provide relief from a sore throat after radiation therapy. Intravenous pain medications may be used if local anesthetics are unsuccessful. The nurse should explain to the client that this is normal and assess the clients neck, but these options do not decrease the clients discomfort.

DIF: Remembering/Knowledge REF: 555
KEY: Cancer| pain| medication
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A nurse cares for a client who had a partial laryngectomy 10 days ago. The client states that all food tastes bland. How should the nurse respond?
a. I will consult the speech therapist to ensure you are swallowing properly.
b. This is normal after surgery. What types of food do you like to eat?
c. I will ask the dietitian to change the consistency of the food in your diet.
d. Replacement of protein, calories, and water is very important after surgery.

ANS: B
Many clients experience changes in taste after surgery. The nurse should identify foods that the client wants to eat to ensure the client maintains necessary nutrition. Although the nurse should collaborate with the speech therapist and dietitian to ensure appropriate replacement of protein, calories, and water, the other responses do not address the clients concerns.

DIF: Applying/Application REF: 549
KEY: Surgical care| nutrition
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

10. A nurse cares for a client who is scheduled for a total laryngectomy. Which action should the nurse take prior to surgery?
a. Assess airway patency, breathing, and circulation.
b. Administer prescribed intravenous pain medication.
c. Assist the client to choose a communication method.
d. Ambulate the client in the hallway to assess gait.

ANS: C
The client will not be able to speak after surgery. The nurse should assist the client to choose a communication method that he or she would like to use after surgery. Assessing the clients airway and administering IV pain medication are done after the procedure. Although ambulation promotes health and decreases the complications of any surgery, this clients gait should not be impacted by a total laryngectomy and therefore is not a priority.

DIF: Applying/Application REF: 556
KEY: Surgical care
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

11. While assessing a client who has facial trauma, the nurse auscultates stridor. The client is anxious and restless. Which action should the nurse take first?

a. Contact the provider and prepare for intubation.
b. Administer prescribed albuterol nebulizer therapy.
c. Place the client in high-Fowlers position.
d. Ask the client to perform deep-breathing exercises.

ANS: A
Facial and neck tissue edema can occur in clients with facial trauma. Airway patency is the highest priority. Clients who experience stridor and hypoxia, manifested by anxiety and restlessness, should be immediately intubated to ensure airway patency. Albuterol decreases bronchi and bronchiole inflammation, not facial and neck edema. Although putting the client in high-Fowlers position and asking the client to perform breathing exercises may temporarily improve the clients comfort, these actions will not decrease the underlying problem or improve airway patency.

DIF: Applying/Application REF: 550
KEY: Trauma
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. A nurse is caring for a client who has sleep apnea and is prescribed modafinil (Provigil). The client asks, How will this medication help me? How should the nurse respond?
a. This medication will treat your sleep apnea.
b. This sedative will help you to sleep at night.
c. This medication will promote daytime wakefulness.
d. This analgesic will increase comfort while you sleep.

ANS: C
Modafinil is helpful for clients who have narcolepsy (uncontrollable daytime sleep) related to sleep apnea. This medication promotes daytime wakefulness.

DIF: Remembering/Knowledge REF: 551
KEY: Medication
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse cares for a client who has packing inserted for posterior nasal bleeding. Which action should the nurse take first?
a. Assess the clients pain level.
b. Keep the clients head elevated.
c. Teach the client about the causes of nasal bleeding.
d. Make sure the string is taped to the clients cheek.

ANS: D
The string should be attached to the clients cheek to hold the packing in place. The nurse needs to make sure that this does not move because it can occlude the clients airway. The other options are good interventions, but ensuring that the airway is patent is the priority objective.

DIF: Applying/Application REF: 549
KEY: Surgical care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A nurse teaches a client to use a room humidifier after a laryngectomy. Which statement should the nurse include in this clients teaching?
a. Add peppermint oil to the humidifier to relax the airway.
b. Make sure you clean the humidifier to prevent infection.
c. Keep the humidifier filled with water at all times.
d. Use the humidifier when you sleep, even during daytime naps.

ANS: B

Priority teaching related to the use of a room humidifier focuses on infection control. Clients should be taught to meticulously clean the humidifier to prevent the spread of mold or other sources of infection. Peppermint oil should not be added to a humidifier. The humidifier should be refilled with water as needed and should be used while awake and asleep.

DIF: Understanding/Comprehension REF: 560
KEY: Surgical care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. A nurse assesses a client who is 6 hours post-surgery for a nasal fracture and has nasal packing in place. Which actions should the nurse take? (Select all that apply.)
a. Observe for clear drainage.
b. Assess for signs of bleeding.
c. Watch the client for frequent swallowing.
d. Ask the client to open his or her mouth.
e. Administer a nasal steroid to decrease edema.
f. Change the nasal packing.

ANS: A, B, C, D
The nurse should observe for clear drainage because of the risk for cerebrospinal fluid leakage. The nurse should assess for signs of bleeding by asking the client to open his or her mouth and observing the back of the throat for bleeding. The nurse should also note whether the client is swallowing frequently because this could indicate postnasal bleeding. A nasal steroid would increase the risk for infection. It is too soon to change the packing, which should be changed by the surgeon the first time.

DIF: Applying/Application REF: 547
KEY: Surgical care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse assesses a client who has developed epistaxis. Which conditions in the clients history should the nurse identify as potential contributors to this problem? (Select all that apply.)
a. Diabetes mellitus
b. Hypertension
c. Leukemia
d. Cocaine use
e. Migraine
f. Elevated platelets

ANS: B, C, D
Frequent causes of nosebleeds include trauma, hypertension, leukemia and other blood dyscrasias, inflammation, tumor, dry air, blowing or picking the nose, cocaine use, and intranasal procedures. Diabetes, migraines, and elevated platelets and cholesterol levels do not cause epistaxis.

DIF: Understanding/Comprehension REF: 548
KEY: Respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse assesses a client who has facial trauma. Which assessment findings require immediate intervention? (Select all that apply.)
a. Stridor
b. Nasal stuffiness
c. Edema of the cheek
d. Ecchymosis behind the ear
e. Eye pain

f. Swollen chin

ANS: A, D
Stridor is a sign of airway obstruction and requires immediate intervention. Ecchymosis, or bruising, behind the ear is called battle sign and indicates basilar skull fracture.
Nasal stuffiness, edema of the cheek or chin, and eye pain do not interfere with respirations or neurologic function, and therefore are not priorities for immediate intervention.

DIF: Applying/Application REF: 550
KEY: Trauma| medical emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A registered nurse (RN) cares for clients on a surgical unit. Which clients should the RN delegate to a licensed practical nurse (LPN)? (Select all that apply.)
a. A 32-year-old who had a radical neck dissection 6 hours ago
b. A 43-year-old diagnosed with cancer after a lung biopsy 2 days ago
c. A 55-year-old who needs discharge teaching after a laryngectomy
d. A 67-year-old who is awaiting preoperative teaching for laryngeal cancer
e. An 88-year-old with esophageal cancer who is awaiting gastric tube placement

ANS: B, E
The nurse can delegate stable clients to the LPN. The client who had a biopsy 2 days ago and the client who is awaiting gastric tube placement are stable. The client who is 6 hours post-surgery is not yet stable. The RN is the only one who can perform discharge and preoperative teaching; teaching cannot be delegated.

DIF: Applying/Application REF: 556
KEY: Interdisciplinary team| delegation MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse teaches a client who is being discharged after a fixed centric occlusion for a mandibular fracture. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. You will need to cut the wires if you start vomiting.
b. Eat six soft or liquid meals each day while recovering.
c. Irrigate your mouth every 2 hours to prevent infection.
d. Sleep in a semi-Fowlers position after the surgery.
e. Gargle with mouthwash that contains Benadryl once a day.

ANS: A, B, C, D
The client needs to know how to cut the wires in case of emergency. If the client vomits, he or she may aspirate. The client should also be taught to eat soft or liquid meals multiple times a day, irrigate the mouth with a Waterpik to prevent infection, and sleep in a semi-Fowlers position to assist in avoiding aspiration. Mouthwash with Benadryl is used for clients who have mouth pain after radiation treatment; it is not used to treat pain in a client with a mandibular fracture.

DIF: Applying/Application REF: 550
KEY: Surgical care| aspiration precautions
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse is assessing clients on a rehabilitation unit. Which clients are at greatest risk for asphyxiation related to inspissated oral and nasopharyngeal secretions? (Select all that apply.)
a. A 24-year-old with a traumatic brain injury
b. A 36-year-old who fractured his left femur
c. A 58-year-old at risk for aspiration following radiation therapy
d. A 66-year-old who is a quadriplegic and has a sacral ulcer
e. An 80-year-old who is aphasic after a cerebral vascular accident

ANS: A, C, D, E

Risk for asphyxiation related to inspissated oral and nasopharyngeal secretions is caused by poor oral hygiene. Clients at risk include those with altered mental status and level of consciousness (traumatic brain injury), dehydration, an inability to communicate (aphasic) and cough effectively (quadriplegic), and a risk of aspiration (aspiration precautions). The client with a fractured femur is at risk for a pulmonary embolism.

DIF: Applying/Application REF: 552
KEY: Medical emergencies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 30: Care of Patients with Noninfectious Lower Respiratory Problems

MULTIPLE CHOICE

1. A nurse assesses several clients who have a history of asthma. Which client should the nurse assess first?
a. A 66-year-old client with a barrel chest and clubbed fingernails
b. A 48-year-old client with an oxygen saturation level of 92% at rest
c. A 35-year-old client who has a longer expiratory phase than inspiratory phase
d. A 27-year-old client with a heart rate of 120 beats/min

ANS: D
Tachycardia can indicate hypoxemia as the body tries to circulate the oxygen that is available. A barrel chest is not an emergency finding. Likewise, a pulse oximetry level of 92% is not considered an acute finding. The expiratory phase is expected to be longer than the inspiratory phase in someone with airflow limitation.

DIF: Applying/Application REF: 567
KEY: Respiratory distress/failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse cares for a client with arthritis who reports frequent asthma attacks. Which action should the nurse take first?
a. Review the clients pulmonary function test results.
b. Ask about medications the client is currently taking.
c. Assess how frequently the client uses a bronchodilator.
d. Consult the provider and request arterial blood gases.

ANS: B
Aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs) can trigger asthma in some people. This results from increased production of leukotriene when aspirin or NSAIDs suppress other inflammatory pathways and is a high priority given the clients history. Reviewing pulmonary function test results will not address the immediate problem of frequent asthma attacks. This is a good intervention for reviewing response to bronchodilators. Questioning the client about the use of bronchodilators will address interventions for the attacks but not their cause. Reviewing arterial blood gas results would not be of use in a client between attacks because many clients are asymptomatic when not having attacks.

DIF: Applying/Application REF: 568
KEY: Respiratory distress/failure| medication
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. After teaching a client who is prescribed a long-acting beta2 agonist medication, a nurse assesses the clients understanding. Which statement indicates the client comprehends the teaching?
a. I will carry this medication with me at all times in case I need it.
b. I will take this medication when I start to experience an asthma attack.
c. I will take this medication every morning to help prevent an acute attack.
d. I will be weaned off this medication when I no longer need it.

ANS: C
Long-acting beta2 agonist medications will help prevent an acute asthma attack because they are long acting. The client will take this medication every day for best effect. The client does not have to always keep this medication with him or her because it is not used as a rescue medication. This is not the medication the client will use during an acute asthma attack because it does not have an immediate onset of action. The client will not be weaned off this medication because this is likely to be one of his or her daily medications.

DIF: Applying/Application REF: 569
KEY: Medication| patient education MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. After teaching a client how to perform diaphragmatic breathing, the nurse assesses the clients understanding. Which action demonstrates that the client correctly understands the teaching?
a. The client lays on his or her side with his or her knees bent.
b. The client places his or her hands on his or her abdomen.
c. The client lays in a prone position with his or her legs straight.
d. The client places his or her hands above his or her head.

ANS: B
To perform diaphragmatic breathing correctly, the client should place his or her hands on his or her abdomen to create resistance. This type of breathing cannot be performed effectively while lying on the side or with hands over the head. This type of breathing would not be as effective lying prone.

DIF: Applying/Application REF: 577
KEY: Respiratory distress/failure| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse cares for a client who has developed esophagitis after undergoing radiation therapy for lung cancer. Which diet selection should the nurse provide for this client?
a. Spaghetti with meat sauce, ice cream
b. Chicken soup, grilled cheese sandwich
c. Omelet, soft whole wheat bread
d. Pasta salad, custard, orange juice

ANS: C
Side effects of radiation therapy may include inflammation of the esophagus. Clients should be taught that bland, soft, high-calorie foods are best, along with liquid nutritional supplements. Tomato sauce may prove too spicy for a client with esophagitis. A grilled cheese sandwich is too difficult to swallow with this condition, and orange juice and other foods with citric acid are too caustic.

DIF: Applying/Application REF: 591
KEY: Cancer| nutrition
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. The nurse is caring for a client with lung cancer who states, I dont want any pain medication because I am afraid Ill become addicted. How should the nurse respond?
a. I will ask the provider to change your medication to a drug that is less potent.
b. Would you like me to use music therapy to distract you from your pain?
c. It is unlikely you will become addicted when taking medicine for pain.
d. Would you like me to give you acetaminophen (Tylenol) instead?

ANS: C
Clients should be encouraged to take their pain medications; addiction usually is not an issue with a client in pain. The nurse would not request that the pain medication be changed unless it was not effective. Other methods to decrease pain can be used, in addition to pain medication.

DIF: Applying/Application REF: 591
KEY: Cancer| pain| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. After teaching a client who is prescribed salmeterol (Serevent), the nurse assesses the clients understanding. Which statement by the client indicates a need for additional teaching?
a. I will be certain to shake the inhaler well before I use it.
b. It may take a while before I notice a change in my asthma.
c. I will use the drug when I have an asthma attack.

d. I will be careful not to let the drug escape out of my nose and mouth.

ANS: C
Salmeterol is designed to prevent an asthma attack; it does not relieve or reverse symptoms. Salmeterol has a slow onset of action; therefore, it should not be used as a rescue drug. The drug must be shaken well because it has a tendency to separate easily. Poor technique on the clients part allows the drug to escape through the nose and mouth.

DIF: Applying/Application REF: 569
KEY: Medication| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A nurse cares for a client with chronic obstructive pulmonary disease (COPD). The client states that he no longer enjoys going out with his friends. How should the nurse respond?
a. There are a variety of support groups for people who have COPD.
b. I will ask your provider to prescribe you with an antianxiety agent.
c. Share any thoughts and feelings that cause you to limit social activities.
d. Friends can be a good support system for clients with chronic disorders.

ANS: C
Many clients with moderate to severe COPD become socially isolated because they are embarrassed by frequent coughing and mucus production. They also can experience fatigue, which limits their activities. The nurse needs to encourage the client to verbalize thoughts and feelings so that appropriate interventions can be selected. Joining a support group would not decrease feelings of social isolation if the client does not verbalize feelings. Antianxiety agents will not help the client with social isolation. Encouraging a client to participate in activities without verbalizing concerns also would not be an effective strategy for decreasing social isolation.

DIF: Applying/Application REF: 576
KEY: Coping| support
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

9. A nurse is teaching a client who has cystic fibrosis (CF). Which statement should the nurse include in this clients teaching?
a. Take an antibiotic each day.
b. Contact your provider to obtain genetic screening.
c. Eat a well-balanced, nutritious diet.
d. Plan to exercise for 30 minutes every day.

ANS: C
Clients with CF often are malnourished due to vitamin deficiency and pancreatic malfunction. Maintaining nutrition is essential. Daily antibiotics and daily exercise are not essential actions. Genetic screening would not help the client manage CF better.

DIF: Applying/Application REF: 582
KEY: Nutrition| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

10. While assessing a client who is 12 hours postoperative after a thoracotomy for lung cancer, a nurse notices that the lower chest tube is dislodged. Which action should the nurse take first?
a. Assess for drainage from the site.
b. Cover the insertion site with sterile gauze.
c. Contact the provider and obtain a suture kit.
d. Reinsert the tube using sterile technique.

ANS: B
Immediately covering the insertion site helps prevent air from entering the pleural space and causing a pneumothorax. The area will not reseal quickly enough to prevent air from entering the chest. The nurse should not leave the client to obtain a suture kit. An occlusive dressing may cause a tension pneumothorax. The site

should only be assessed after the insertion site is covered. The provider should be called to reinsert the chest tube or prescribe other treatment options.

DIF: Applying/Application REF: 593
KEY: Drains| surgical care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse assesses a client who is prescribed fluticasone (Flovent) and notes oral lesions. Which action should the nurse take?
a. Encourage oral rinsing after fluticasone administration.
b. Obtain an oral specimen for culture and sensitivity.
c. Start the client on a broad-spectrum antibiotic.
d. Document the finding as a known side effect.

ANS: A
The drug reduces local immunity and increases the risk for local infection, especially Candida albicans. Rinsing the mouth after using the inhaler will decrease the risk for developing this infection. Use of mouthwash and broad-spectrum antibiotics is not warranted in this situation. The nurse should document the finding, but the best action to take is to have the client start rinsing his or her mouth after using fluticasone. An oral specimen for culture and sensitivity will not provide information necessary to care for this client.

DIF: Applying/Application REF: 569
KEY: Medication| fungal infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A nurse cares for a client who is infected with Burkholderia cepacia. Which action should the nurse take first when admitting this client to a pulmonary care unit?
a. Instruct the client to wash his or her hands after contact with other people.
b. Implement Droplet Precautions and don a surgical mask.
c. Keep the client isolated from other clients with cystic fibrosis.
d. Obtain blood, sputum, and urine culture specimens.

ANS: C
Burkholderia cepacia infection is spread through casual contact between cystic fibrosis clients, thus the need for these clients to be separated from one another. Strict isolation measures will not be necessary. Although the client should wash his or her hands frequently, the most important measure that can be implemented on the unit is isolation of the client from other clients with cystic fibrosis. There is no need to implement Droplet Precautions or don a surgical mask when caring for this client. Obtaining blood, sputum, and urine culture specimens will not provide information necessary to care for a client with Burkholderia cepacia infection.

DIF: Applying/Application REF: 583
KEY: Pulmonary infection| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A nurse cares for a client who had a chest tube placed 6 hours ago and refuses to take deep breaths because of the pain. Which action should the nurse take?
a. Ambulate the client in the hallway to promote deep breathing.
b. Auscultate the clients anterior and posterior lung fields.
c. Encourage the client to take shallow breaths to help with the pain.
d. Administer pain medication and encourage the client to take deep breaths.

ANS: D
A chest tube is placed in the pleural space and may be uncomfortable for a client. The nurse should provide pain medication to minimize discomfort and encourage the client to take deep breaths. The other responses do not address the clients discomfort and need to take deep breaths to prevent complications.

DIF: Applying/Application REF: 595
KEY: Pain| pharmacologic pain management| drain| surgical care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. A nurse cares for a client who has a chest tube. When would this client be at highest risk for developing a pneumothorax?
a. When the insertion site becomes red and warm to the touch
b. When the tube drainage decreases and becomes sanguineous
c. When the client experiences pain at the insertion site
d. When the tube becomes disconnected from the drainage system

ANS: D
Intrathoracic pressures are less than atmospheric pressures; therefore, if the chest tube becomes disconnected from the drainage system, air can be sucked into the pleural space and cause a pneumothorax. A red, warm, and painful insertion site does not increase the clients risk for a pneumothorax. Tube drainage should decrease and become serous as the client heals. Sanguineous drainage is a sign of bleeding but does not increase the clients risk for a pneumothorax.

DIF: Applying/Application REF: 593
KEY: Drain| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A nurse cares for a client with a 40-year smoking history who is experiencing distended neck veins and dependent edema. Which physiologic process should the nurse correlate with this clients history and clinical manifestations?
a. Increased pulmonary pressure creating a higher workload on the right side of the heart
b. Exposure to irritants resulting in increased inflammation of the bronchi and bronchioles
c. Increased number and size of mucus glands producing large amounts of thick mucus
d. Left ventricular hypertrophy creating a decrease in cardiac output

ANS: A
Smoking increases pulmonary hypertension, resulting in cor pulmonale, or right-sided heart failure. Increased pressures in the lungs make it more difficult for blood to flow through the lungs. Blood backs up into the right side of the heart and then into the peripheral venous system, creating distended neck veins and dependent edema. Inflammation in bronchi and bronchioles creates an airway obstruction which manifests as wheezes. Thick mucus in the lungs has no impact on distended neck veins and edema. Left ventricular hypertrophy is associated with left heart failure and is not caused by a 40-year smoking history.

DIF: Remembering/Knowledge REF: 78
KEY: Heart failure| cor pulmonale
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

16. A nurse cares for a client with chronic obstructive pulmonary disease (COPD) who appears thin and disheveled. Which question should the nurse ask first?
a. Do you have a strong support system?
b. What do you understand about your disease?
c. Do you experience shortness of breath with basic activities?
d. What medications are you prescribed to take each day?

ANS: C
Clients with severe COPD may not be able to perform daily activities, including bathing and eating, because of excessive shortness of breath. The nurse should ask the client if shortness of breath is interfering with basic activities. Although the nurse should know about the clients support systems, current knowledge, and medications, these questions do not address the clients appearance.

DIF: Applying/Application REF: 576

KEY: Functional ability
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity

17. The nurse is caring for a client who is prescribed a long-acting beta2 agonist. The client states, The medication is too expensive to use every day. I only use my inhaler when I have an attack. How should the nurse respond?
a. You are using the inhaler incorrectly. This medication should be taken daily.
b. If you decrease environmental stimuli, it will be okay for you to use the inhaler only for asthma attacks.
c. Tell me more about your fears related to feelings of breathlessness.
d. It is important to use this type of inhaler every day. Lets identify potential community services to help you.

ANS: D
Long-acting beta2 agonists should be used every day to prevent asthma attacks. This medication should not be taken when an attack starts. Asthma medications can be expensive. Telling the client that he or she is using the inhaler incorrectly does not address the clients financial situation, which is the main issue here. Clients with limited incomes should be provided with community resources. Asking the client about fears related to breathlessness does not address the clients immediate concerns.

DIF: Applying/Application REF: 569
KEY: Case management| medication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

18. A pulmonary nurse cares for clients who have chronic obstructive pulmonary disease (COPD). Which client should the nurse assess first?
a. A 46-year-old with a 30pack-year history of smoking
b. A 52-year-old in a tripod position using accessory muscles to breathe
c. A 68-year-old who has dependent edema and clubbed fingers
d. A 74-year-old with a chronic cough and thick, tenacious secretions

ANS: B
The client who is in a tripod position and using accessory muscles is working to breathe. This client must be assessed first to establish how well the client is breathing and provide interventions to minimize respiratory failure. The other clients are not in acute distress.

DIF: Applying/Application REF: 574
KEY: Health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. The nurse is teaching a client with chronic obstructive pulmonary disease who has been prescribed continuous oxygen therapy at home. Which statement indicates the client correctly understands the teaching?
a. I plan to wear my oxygen when I exercise and feel short of breath.
b. I will use my portable oxygen when grilling burgers in the backyard.
c. I plan to use cotton balls to cushion the oxygen tubing on my ears.
d. I will only smoke while I am wearing my oxygen via nasal cannula.

ANS: C
Cotton balls can decrease pressure ulcers from the oxygen tubing. Continuous oxygen orders mean the client should wear the oxygen at all times. Oxygen fuels a fire. Wearing oxygen while grilling and smoking increases the risk for fire.

DIF: Applying/Application REF: 578
KEY: Safety| patient education| oxygen therapy
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

20. A nurse cares for a client who has a pleural chest tube. Which action should the nurse take to ensure safe

use of this equipment?
a. Strip the tubing to minimize clot formation and ensure patency.
b. Secure tubing junctions with clamps to prevent accidental disconnections.
c. Connect the chest tube to wall suction at the level prescribed by the provider.
d. Keep padded clamps at the bedside for use if the drainage system is interrupted.

ANS: D
Padded clamps should be kept at the bedside for use if the drainage system becomes dislodged or is interrupted. The nurse should never strip the tubing. Tubing junctions should be taped, not clamped. Wall suction should be set at the level indicated by the devices manufacturer, not the provider.

DIF: Remembering/Knowledge REF: 593
KEY: Drains| postsurgical care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

21. A nurse cares for a client who tests positive for alpha1-antitrypsin (AAT) deficiency. The client asks, What does this mean? How should the nurse respond?
a. Your children will be at high risk for the development of chronic obstructive pulmonary disease.
b. I will contact a genetic counselor to discuss your condition.
c. Your risk for chronic obstructive pulmonary disease is higher, especially if you smoke.
d. This is a recessive gene and should have no impact on your health.

ANS: C
The gene for AAT is a recessive gene. Clients with only one allele produce enough AAT to prevent chronic obstructive pulmonary disease (COPD) unless the client smokes. A client with two alleles is at high risk for COPD even if not exposed to smoke or other irritants. The client is a carrier, and children may or may not be at high risk depending on the partners AAT levels. Contacting a genetic counselor may be helpful but does not address the clients current question.

DIF: Applying/Application REF: 573
KEY: Gene| allele| health screening| a1AT (alpha1-antitrypsin) gene
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

22. A nurse cares for a female client who has a family history of cystic fibrosis. The client asks, Will my children have cystic fibrosis? How should the nurse respond?
a. Since many of your family members are carriers, your children will also be carriers of the gene.
b. Cystic fibrosis is an autosomal recessive disorder. If you are a carrier, your children will have the disorder.
c. Since you have a family history of cystic fibrosis, I would encourage you and your partner to be tested.
d. Cystic fibrosis is caused by a protein that controls the movement of chloride. Adjusting your diet will decrease the spread of this disorder.

ANS: C
Cystic fibrosis is an autosomal recessive disorder in which both gene alleles must be mutated for the disorder to be expressed. The nurse should encourage both the client and partner to be tested for the abnormal gene. The other statements are not true.

DIF: Applying/Application REF: 582
KEY: Gene| allele| health screening MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

23. A nurse administers medications to a client who has asthma. Which medication classification is paired correctly with its physiologic response to the medication?
a. Bronchodilator Stabilizes the membranes of mast cells and prevents the release of inflammatory mediators
b. Cholinergic antagonist Causes bronchodilation by inhibiting the parasympathetic nervous system
c. Corticosteroid Relaxes bronchiolar smooth muscles by binding to and activating pulmonary beta2 receptors
d. Cromone Disrupts the production of pathways of inflammatory mediators

ANS: B
Cholinergic antagonist drugs cause bronchodilation by inhibiting the parasympathetic nervous system. This allows the sympathetic nervous system to dominate and release norepinephrine that actives beta2 receptors. Bronchodilators relax bronchiolar smooth muscles by binding to and activating pulmonary beta2 receptors. Corticosteroids disrupt the production of pathways of inflammatory mediators. Cromones stabilize the membranes of mast cells and prevent the release of inflammatory mediators.

DIF: Remembering/Knowledge REF: 569
KEY: Medications
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

24. A nurse auscultates a clients lung fields. Which pathophysiologic process should the nurse associate with this breath sound?
(Click the media button to hear the audio clip.)
a. Inflammation of the pleura
b. Constriction of the bronchioles
c. Upper airway obstruction
d. Pulmonary vascular edema

ANS: A
A pleural friction rub can be heard when the pleura is inflamed and rubbing against the lung wall. The other pathophysiologic processes would not cause a pleural friction rub. Constriction of the bronchioles may be heard as a wheeze, upper airway obstruction may be heard as stridor, and pulmonary vascular edema may be heard as crackles.

DIF: Applying/Application REF: 590
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

25. A nurse auscultates a clients lung fields. Which action should the nurse take based on the lung sounds?
(Click the media button to hear the audio clip.)
a. Assess for airway obstruction.
b. Initiate oxygen therapy.
c. Assess vital signs.
d. Elevate the clients head.

ANS: A
Stridor is the sound heard, and it indicates severe airway constriction. The nurse must administer a bronchodilator to get air into the lungs. Administering oxygen, assessing vital signs, and elevating the clients head will not help until the clients airways are open.

DIF: Applying/Application REF: 590
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

26. The nurse instructs a client on the steps needed to obtain a peak expiratory flow rate. In which order should these steps occur?
1. Take as deep a breath as possible.
2. Stand up (unless you have a physical disability).
3. Place the meter in your mouth, and close your lips around the mouthpiece.
4. Make sure the device reads zero or is at base level.
5. Blow out as hard and as fast as possible for 1 to 2 seconds.
6. Write down the value obtained.
7. Repeat the process two additional times, and record the highest number in your chart.
a. 4, 2, 1, 3, 5, 6, 7
b. 3, 4, 1, 2, 5, 7, 6

c. 2, 1, 3, 4, 5, 6, 7
d. 1, 3, 2, 5, 6, 7, 4

ANS: A
The proper order for obtaining a peak expiratory flow rate is as follows. Make sure the device reads zero or is at base level. The client should stand up (unless he or she has a physical disability). The client should take as deep a breath as possible, place the meter in the mouth, and close the lips around the mouthpiece. The client should blow out as hard and as fast as possible for 1 to 2 seconds. The value obtained should be written down. The process should be repeated two more times, and the highest of the three numbers should be recorded in the clients chart.

DIF: Applying/Application REF: 567
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

27. The nurse instructs a client on how to correctly use an inhaler with a spacer. In which order should these steps occur?
1. Press down firmly on the canister to release one dose of medication.
2. Breathe in slowly and deeply.
3. Shake the whole unit vigorously three or four times.
4. Insert the mouthpiece of the inhaler into the nonmouthpiece end of the spacer.
5. Place the mouthpiece into your mouth, over the tongue, and seal your lips tightly around the mouthpiece.
6. Remove the mouthpiece from your mouth, keep your lips closed, and hold your breath for at least 10 seconds.
a. 2, 3, 4, 5, 6, 1
b. 3, 4, 5, 1, 6, 2
c. 4, 3, 5, 1, 2, 6
d. 5, 3, 6, 1, 2, 4

ANS: C
The proper order for correctly using an inhaler with a spacer is as follows. Insert the mouthpiece of the inhaler into the nonmouthpiece end of the spacer. Shake the whole unit vigorously three or four times. Place the mouthpiece into the mouth, over the tongue, and seal the lips tightly around it. Press down firmly on the canister of the inhaler to release one dose of medication into the spacer. Breathe in slowly and deeply. Remove the mouthpiece from the mouth, and, keeping the lips closed, hold the breath for at least 10 seconds. Then breathe out slowly. Wait at least 1 minute between puffs.

DIF: Applying/Application REF: 570
KEY: Medication safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

28. A nurse evaluates the following arterial blood gas and vital sign results for a client with chronic obstructive pulmonary disease (COPD):
Arterial Blood Gas Results Vital Signs
pH = 7.32
PaCO2 = 62 mm Hg
PaO2 = 46 mm Hg
HCO3 = 28 mEq/L Heart rate = 110 beats/min
Respiratory rate = 12 breaths/min
Blood pressure = 145/65 mm Hg
Oxygen saturation = 76%
Which action should the nurse take first?
a. Administer a short-acting beta2 agonist inhaler.
b. Document the findings as normal for a client with COPD.
c. Teach the client diaphragmatic breathing techniques.
d. Initiate oxygenation therapy to increase saturation to 92%.

ANS: D
Oxygen should be administered to a client who is hypoxic even if the client has COPD and is a carbon dioxide retainer. The other interventions do not address the clients hypoxia, which is the priority.

DIF: Applying/Application REF: 578
KEY: Oxygen therapy| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse assesses a client with asthma and notes bilateral wheezing, decreased pulse oxygen saturation, and suprasternal retraction on inhalation. Which actions should the nurse take? (Select all that apply.)
a. Administer prescribed salmeterol (Serevent) inhaler.
b. Assess the client for a tracheal deviation.
c. Administer oxygen to keep saturations greater than 94%.
d. Perform peak expiratory flow readings.
e. Administer prescribed albuterol (Proventil) inhaler.

ANS: C, E
Suprasternal retraction caused by inhalation usually indicates that the client is using accessory muscles and is having difficulty moving air into the respiratory passages because of airway narrowing. Wheezing indicates a narrowed airway; a decreased pulse oxygen saturation also supports this finding. The asthma is not responding to the medication, and intervention is needed. Administration of a rescue inhaler is indicated, probably along with administration of oxygen. The nurse would not do a peak flow reading at this time, nor would a code be called. Midline trachea is a normal and expected finding.

DIF: Applying/Application REF: 590
KEY: Respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse assesses a client who has a mediastinal chest tube. Which symptoms require the nurses immediate intervention? (Select all that apply.)
a. Production of pink sputum
b. Tracheal deviation
c. Pain at insertion site
d. Sudden onset of shortness of breath
e. Drainage greater than 70 mL/hr
f. Disconnection at Y site

ANS: B, D, E, F
Immediate intervention is warranted if the client has tracheal deviation because this could indicate a tension pneumothorax. Sudden shortness of breath could indicate dislodgment of the tube, occlusion of the tube, or pneumothorax. Drainage greater than 70 mL/hr could indicate hemorrhage. Disconnection at the Y site could result in air entering the tubing. Production of pink sputum, oxygen saturation less than 95%, and pain at the insertion site are not signs/symptoms that would require immediate intervention.

DIF: Applying/Application REF: 594
KEY: Drain| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse teaches a client who has chronic obstructive pulmonary disease. Which statements related to nutrition should the nurse include in this clients teaching? (Select all that apply.)
a. Avoid drinking fluids just before and during meals.
b. Rest before meals if you have dyspnea.
c. Have about six small meals a day.

d. Eat high-fiber foods to promote gastric emptying.
e. Increase carbohydrate intake for energy.

ANS: A, B, C
Fluids can make a client feel bloated and should be avoided with meals. Resting before the meal will help a client with dyspnea. Six small meals a day also will help to decrease bloating. Fibrous foods can produce gas, which can cause abdominal bloating and can increase shortness of breath. The client should increase calorie and protein intake to prevent malnourishment. The client should not increase carbohydrate intake as this will increase carbon dioxide production and increase the clients risk of for acidosis.

DIF: Applying/Application REF: 580
KEY: Nutrition| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse assesses a client with chronic obstructive pulmonary disease. Which questions should the nurse ask to determine the clients activity tolerance? (Select all that apply.)
a. What color is your sputum?
b. Do you have any difficulty sleeping?
c. How long does it take to perform your morning routine?
d. Do you walk upstairs every day?
e. Have you lost any weight lately?

ANS: B, C, E
Difficulty sleeping could indicate worsening breathlessness, as could taking longer to perform activities of daily living. Weight loss could mean increased dyspnea as the client becomes too fatigued to eat. The color of the clients sputum would not assist in determining activity tolerance. Asking whether the client walks upstairs every day is not as pertinent as determining if the client becomes short of breath on walking upstairs, or if the client goes upstairs less often than previously.

DIF: Applying/Application REF: 574
KEY: Functional ability
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse assesses a client who has a chest tube. For which manifestations should the nurse immediately intervene? (Select all that apply.)
a. Production of pink sputum
b. Tracheal deviation
c. Sudden onset of shortness of breath
d. Pain at insertion site
e. Drainage of 75 mL/hr

ANS: B, C
Tracheal deviation and sudden onset of shortness of breath are manifestations of a tension pneumothorax. The nurse must intervene immediately for this emergency situation. Pink sputum is associated with pulmonary edema and is not a complication of a chest tube. Pain at the insertion site and drainage of 75 mL/hr are normal findings with a chest tube.

DIF: Applying/Application REF: 594
KEY: Drain| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse plans care for a client who has chronic obstructive pulmonary disease and thick, tenacious secretions. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Ask the client to drink 2 liters of fluids daily.
b. Add humidity to the prescribed oxygen.
c. Suction the client every 2 to 3 hours.
d. Use a vibrating positive expiratory pressure device.

e. Encourage diaphragmatic breathing.

ANS: A, B, D
Interventions to decrease thick tenacious secretions include maintaining adequate hydration and providing humidified oxygen. These actions will help to thin secretions, making them easier to remove by coughing. The use of a vibrating positive expiratory pressure device can also help clients remove thick secretions. Although suctioning may assist with the removal of secretions, frequent suctioning can cause airway trauma and does not support the clients ability to successfully remove secretions through normal coughing. Diaphragmatic breathing is not used to improve the removal of thick secretions.

DIF: Applying/Application REF: 579
KEY: Respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse cares for a client who is prescribed an intravenous prostacyclin agent. Which actions should the nurse take to ensure the clients safety while on this medication? (Select all that apply.)
a. Keep an intravenous line dedicated strictly to the infusion.
b. Teach the client that this medication increases pulmonary pressures.
c. Ensure that there is always a backup drug cassette available.
d. Start a large-bore peripheral intravenous line.
e. Use strict aseptic technique when using the drug delivery system.

ANS: A, C, E
Intravenous prostacyclin agents should be administered in a central venous catheter with a dedicated intravenous line for this medication. Death has been reported when the drug delivery system is interrupted; therefore, a backup drug cassette should also be available. The nurse should use strict aseptic technique when using the drug delivery system. The nurse should teach the client that this medication decreases pulmonary pressures and increases lung blood flow.

DIF: Understanding/Comprehension REF: 586
KEY: Medication administration| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 31: Care of Patients with Infectious Respiratory Problems

MULTIPLE CHOICE

1.A nurse working in a geriatric clinic sees clients with cold symptoms and rhinitis. Which drug would be appropriate to teach these clients to take for their symptoms?

a. Chlorpheniramine (Chlor-Trimeton)
b. Diphenhydramine (Benadryl)
c. Fexofenadine (Allegra)
d. Hydroxyzine (Vistaril)

ANS: C

First-generation antihistamines are not appropriate for use in the older population. These drugs include chlorpheniramine, diphenhydramine, and hydroxyzine. Fexofenadine is a second-generation antihistamine.

DIF:Remembering/Knowledge REF: 597

KEY:Antihistamines| older adults| histamine blocker

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2.A nurse in a family practice clinic is preparing discharge instructions for a client reporting facial pain that is worse when bending over, tenderness across the cheeks, and postnasal discharge. What instruction will be most helpful?

a. Ice packs may help with the facial pain.
b. Limit fluids to dry out your sinuses.
c. Try warm, moist heat packs on your face.
d. We will schedule you for a computed tomography scan this week.

ANS: C

This client has rhinosinusitis. Comfort measures for this condition include breathing in warm steam, hot packs, nasal saline irrigations, sleeping with the head elevated, increased fluids, and avoiding cigarette smoke. The client does not need a CT scan.

DIF:Understanding/Comprehension REF: 597

KEY:Infectious respiratory problems| nonpharmacologic comfort interventions| patient educationMSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3.Which teaching point is most important for the client with bacterial pharyngitis?

a. Gargle with warm salt water.
b. Take all antibiotics as directed.
c. Use a humidifier in the bedroom.
d. Wash hands frequently.

ANS: B

Any client on antibiotics must be instructed to complete the entire course of antibiotics. Not completing them can lead to complications or drug-resistant strains of bacteria. The other instructions are appropriate, just not the most important.

DIF:Understanding/Comprehension REF: 598

KEY:Antibiotics| infectious respiratory problems| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4.A client is in the family practice clinic reporting a severe cold that started 4 days ago. On examination, the nurse notes the client also has a severe headache and muscle aches. What action by the nurse is best?

a. Educate the client on oseltamivir (Tamiflu).
b. Facilitate admission to the hospital.
c. Instruct the client to have a flu vaccine.
d. Teach the client to sneeze in the upper sleeve.

ANS: D

Sneezing and coughing into ones sleeve helps prevent the spread of upper respiratory infections. The client does have manifestations of the flu (influenza), but it is too late to start antiviral medications; to be effective, they must be started within 24 to 48 hours of symptom onset. The client does not need hospital admission. The client should be instructed to have a flu vaccination, but now that he or she has the flu, vaccination will have to wait until next year.

DIF:Applying/Application REF: 600

KEY: Influenza| antiviral| medications| patient education| infection control

MSC:Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

5.The charge nurse on a medical unit is preparing to admit several clients who have possible pandemic flu during a preparedness drill. What action by the nurse is best?

a. Admit the clients on Contact Precautions.
b. Cohort the clients in the same area of the unit.
c. Do not allow pregnant caregivers to care for these clients.
d. Place the clients on enhanced Droplet Precautions.

ANS: B

Preventing the spread of pandemic flu is equally important as caring for the clients who have it. Clients can be cohorted together in the same set of rooms on one part of the unit to use distancing to help prevent the spread of the disease. The other actions are not appropriate.

DIF:Applying/Application REF: 601

KEY:Infection control| Transmission-Based Precautions| emergency and disaster preparedness/management plans

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

6.A client admitted for pneumonia has been tachypneic for several days. When the nurse starts an IV to give fluids, the client questions this action, saying I have been drinking tons of water. How am I dehydrated? What response by the nurse is best?

a. Breathing so quickly can be dehydrating.
b. Everyone with pneumonia is dehydrated.
c. This is really just to administer your antibiotics.
d. Why do you think you are so dehydrated?

ANS: A

Tachypnea and mouth breathing, both seen in pneumonia, increase insensible water loss and can lead to a degree of dehydration. The other options do not give the client useful information.

DIF:Applying/Application REF: 606

KEYneumonia| fluid and electrolyte imbalances| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7.An older adult is brought to the emergency department by a family member, who reports a moderate change in mental status and mild cough. The client is afebrile. The health care provider orders a chest x-ray. The family member questions why this is needed since the manifestations seem so vague. What response by the nurse is best?

a. Chest x-rays are always ordered when we suspect pneumonia.
b. Older people often have vague symptoms, so an x-ray is essential.
c. The x-ray can be done and read before laboratory work is reported.
d. We are testing for any possible source of infection in the client.

ANS: B

It is essential to obtain an early chest x-ray in older adults suspected of having pneumonia because symptoms are often vague. Waiting until definitive manifestations are present to obtain the x-ray leads to a costly delay in treatment. Stating that chest x-rays are always ordered does not give the family definitive information. The x-ray can be done while laboratory values are still pending, but this also does not provide specific information about the importance of a chest x-ray in this client. The client has manifestations of pneumonia, so the staff is not testing for any possible source of infection but rather is testing for a suspected disorder.

DIF:Understanding/Comprehension REF: 605

KEY:Older adult| pneumonia| infection| communication

MSC:Integrated Process: Communication and Documentation

NOT:Client Needs Category: Health Promotion and Maintenance

8.A client has been diagnosed with tuberculosis (TB). What action by the nurse takes highest priority?

a. Educating the client on adherence to the treatment regimen
b. Encouraging the client to eat a well-balanced diet
c. Informing the client about follow-up sputum cultures
d. Teaching the client ways to balance rest with activity

ANS: A

The treatment regimen for TB ranges from 6 to 12 months, making adherence problematic for many people. The nurse should stress the absolute importance of following the treatment plan for the entire duration of prescribed therapy. The other options are appropriate topics to educate this client on but do not take priority.

DIF:Applying/Application REF: 610

KEYatient education| infection| antibiotics| tuberculosis

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaption

9.A client has been admitted for suspected inhalation anthrax infection. What question by the nurse is most important?

a. Are any family members also ill?
b. Have you traveled recently?
c. How long have you been ill?
d. What is your occupation?

ANS: D

Inhalation anthrax is rare and is an occupational hazard among people who work with animal wool, bone meal, hides, and skin, such as taxidermists and veterinarians. Inhalation anthrax seen in someone without an occupational risk is considered a bioterrorism event and must be reported to authorities immediately. The other questions are appropriate for anyone with an infection.

DIF:Applying/Application REF: 612

KEY:Infection| nursing assessment| anthrax| bioterrorism

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10.A nurse is caring for several older clients in the hospital that the nurse identifies as being at high risk for healthcare-associated pneumonia. To reduce this risk, what activity should the nurse delegate to the unlicensed assistive personnel (UAP)?

a. Encourage between-meal snacks.
b. Monitor temperature every 4 hours.
c. Provide oral care every 4 hours.
d. Report any new onset of cough.

ANS: C

Oral colonization by gram-negative bacteria is a risk factor for healthcare-associated pneumonia. Good,

frequent oral care can help prevent this from developing and is a task that can be delegated to the UAP. Encouraging good nutrition is important, but this will not prevent pneumonia. Monitoring temperature and reporting new cough in clients is important to detect the onset of possible pneumonia but do not prevent it.

DIF:Applying/Application REF: 603

KEY: Delegation| oral care| pneumonia| older adult| unlicensed assistive personnel (UAP)

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11.The emergency department (ED) manager is reviewing client charts to determine how well the staff performs when treating clients with community-acquired pneumonia. What outcome demonstrates that goals for this client type have been met?

a. Antibiotics started before admission
b. Blood cultures obtained within 20 minutes
c. Chest x-ray obtained within 30 minutes
d. Pulse oximetry obtained on all clients

ANS: A

Goals for treatment of community-acquired pneumonia include initiating antibiotics prior to inpatient admission or within 6 hours of presentation to the ED. Timely collection of blood cultures, chest x-ray, and pulse oximetry are important as well but do not coincide with established goals.

DIF:Evaluating/Synthesis REF: 603

KEY:Infection| pneumonia| core measures

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12.A nurse has educated a client on isoniazid (INH). What statement by the client indicates teaching has been effective?

a. I need to take extra vitamin C while on INH.
b. I should take this medicine with milk or juice.
c. I will take this medication on an empty stomach.
d. My contact lenses will be permanently stained.

ANS: C

INH needs to be taken on an empty stomach, either 1 hour before or 2 hours after meals. Extra vitamin B needs to be taken while on the drug. Staining of contact lenses commonly occurs while taking rifampin (Rifadin).

DIF:Evaluating/Synthesis REF: 610

KEY: Antibiotics| anti-tuberculosis agents| medication-food interactions| patient education

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13.A client has been taking isoniazid (INH) for tuberculosis for 3 weeks. What laboratory results need to be reported to the health care provider immediately?

a. Albumin: 5.1 g/dL
b. Alanine aminotransferase (ALT): 180 U/L
c. Red blood cell (RBC) count: 5.2/mm3
d. White blood cell (WBC) count: 12,500/mm3

ANS: B

INH can cause liver damage, especially if the client drinks alcohol. The ALT (one of the liver enzymes) is extremely high and needs to be reported immediately. The albumin and RBCs are normal. The WBCs are slightly high, but that would be an expected finding in a client with an infection.

DIF:Analyzing/Analysis REF: 610

KEY: Infection| anti-tuberculosis agents| laboratory values| communication

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14.A client seen in the emergency department reports fever, fatigue, and dry cough but no other upper respiratory symptoms. A chest x-ray reveals mediastinal widening. What action by the nurse is best?

a. Collect a sputum sample for culture by deep suctioning.
b. Inform the client that antibiotics will be needed for 60 days.
c. Place the client on Airborne Precautions immediately.
d. Tell the client that directly observed therapy is needed.

ANS: B

This client has manifestations of early inhalation anthrax. For treatment, after IV antibiotics are finished, oral antibiotics are continued for at least 60 days. Sputum cultures are not needed. Anthrax is not transmissible from person to person, so Standard Precautions are adequate. Directly observed therapy is often used for tuberculosis.

DIF:Applying/Application REF: 613

KEY:Anthrax| antibiotics| Standard Precautions| Transmission-Based Precautions| patient educationMSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

15.A client has been hospitalized with tuberculosis (TB). The clients spouse is fearful of entering the room where the client is in isolation and refuses to visit. What action by the nurse is best?

a. Ask the spouse to explain the fear of visiting in further detail.
b. Inform the spouse the precautions are meant to keep other clients safe.
c. Show the spouse how to follow the isolation precautions to avoid illness.
d. Tell the spouse that he or she has already been exposed, so its safe to visit.

ANS: A

The nurse needs to obtain further information about the spouses specific fears so they can be addressed. This will decrease stress and permit visitation, which will be beneficial for both client and spouse. Precautions for TB prevent transmission to all who come into contact with the client. Explaining isolation precautions and what to do when entering the room will be helpful, but this is too narrow in scope to be the best answer. Telling the spouse its safe to visit is demeaning of the spouses feelings.

DIF:Applying/Application REF: 612

KEY: Psychosocial response| therapeutic communication| communication| caring

MSC:Integrated Process: Caring

NOT: Client Needs Category: Psychosocial Integrity

16.A client is being discharged on long-term therapy for tuberculosis (TB). What referral by the nurse is most appropriate?

a. Community social worker for Meals on Wheels
b. Occupational therapy for job retraining
c. Physical therapy for homebound therapy services
d. Visiting Nurses for directly observed therapy

ANS: D

Directly observed therapy is often utilized for managing clients with TB in the community. Meals on Wheels, job retraining, and home therapy may or may not be appropriate.

DIF:Applying/Application REF: 612

KEY:Anti-tuberculosis agents| referrals| infection| interdisciplinary team

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17.A client is in the family practice clinic reporting a severe cough that has lasted for 5 weeks. The client is so exhausted after coughing that work has become impossible. What action by the nurse is most appropriate?

a. Arrange for immediate hospitalization.
b. Facilitate polymerase chain reaction testing.
c. Have the client produce a sputum sample.
d. Obtain two sets of blood cultures.

ANS: B

Polymerase chain reaction testing is used to diagnose pertussis, which this client is showing manifestations of. Hospitalization may or may not be needed but is not the most important action. The client may or may not be able to produce sputum, but sputum cultures for this disease must be obtained via deep suctioning. Blood cultures will be negative.

DIF:Remembering/Knowledge REF: 613

KEY:Laboratory values| infection| respiratory system

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

18.A client has the diagnosis of valley fever accompanied by myalgias and arthralgias. What treatment should the nurse educate the client on?

a. Intravenous amphotericin B
b. Long-term anti-inflammatories
c. No specific treatment
d. Oral fluconazole (Diflucan)

ANS: D

Valley fever, or coccidioidomycosis, is a fungal infection. Many people do not need treatment and the disease resolves on its own. However, the presence of joint and muscle pain indicates a moderate infection that needs treatment with antifungal medications. IV amphotericin is reserved for pregnant women and those with severe infection. Anti-inflammatory medications may be used to treat muscle aches and pain but are not used long term.

DIF:Applying/Application REF: 614

KEY: Infection| fungal infection| anti-fungal medications| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

19.A client is in the family medicine clinic reporting a dry, sore throat. The provider asks the nurse to assess for odynophagia. What assessment technique is most appropriate?

a. Ask the client what foods cause trouble swallowing.
b. Assess the client for pain when swallowing.
c. Determine if the client can swallow saliva.
d. Palpate the clients jaw while swallowing.

ANS: B

Odynophagia is painful swallowing. The nurse should assess the client for this either by asking or by having the client attempt to drink water. It is not related to specific foods and is not assessed by palpating the jaw. Being unable to swallow saliva is not odynophagia, but it would be a serious situation.

DIF:Applying/Application REF: 597

KEY: Infection| respiratory system| respiratory disorders| respiratory assessment| nursing assessment MSC: Integrated Process: Nursing Process: Assessment

NOT:Client Needs Category: Health Promotion and Maintenance

20.A client is admitted with suspected pneumonia from the emergency department. The client went to the primary care provider a few days ago and shows the nurse the results of what the client calls an allergy test, as shown below:

What action by the nurse takes priority?

a. Assess the client for possible items to which he or she is allergic.
b. Call the primary care providers office to request records.
c. Immediately place the client on Airborne Precautions.
d. Prepare to begin administration of intravenous antibiotics.

ANS: C

This allergy test is actually a positive tuberculosis test. The client should be placed on Airborne Precautions immediately. The other options do not take priority over preventing the spread of the disease.

DIF:Applying/Application REF: 608

KEY: Infection| Transmission-Based Precautions| nursing implementation

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

21.A nurse admits a client from the emergency department. Client data are listed below:

History	Physical Assessment	Laboratory Values
70 years of age	Crackles and rhonchi heard throughout the lungs	WBC: 5,200/mm^3
History of diabetes	Dullness to percussion LLL	PaO_2 on room air 65 mm Hg
On insulin twice a day	Afebrile	
Reports new-onset dyspnea and productive cough	Oriented to person only	

What action by the nurse is the priority?

a. Administer oxygen at 4 liters per nasal cannula.
b. Begin broad-spectrum antibiotics.
c. Collect a sputum sample for culture.
d. Start an IV of normal saline at 50 mL/hr.

ANS: A

All actions are appropriate for this client who has manifestations of pneumonia. However, airway and breathing come first, so begin oxygen administration and titrate it to maintain saturations greater than 95%. Start the IV and collect a sputum culture, and then begin antibiotics.

DIF:Analyzing/Analysis REF: 606

KEYneumonia| antibiotics| oxygen therapy

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1.A nurse is providing pneumonia vaccinations in a community setting. Due to limited finances, the event organizers must limit giving the vaccination to priority groups. What clients would be considered a priority

when administering the pneumonia vaccination? **(Select all that apply.)**

a. 22-year-old client with asthma
b. Client who had a cholecystectomy last year
c. Client with well-controlled diabetes
d. Healthy 72-year-old client
e. Client who is taking medication for hypertension

ANS: A, C, D, E

Clients over 65 years of age and any client (no matter what age) with a chronic health condition would be considered a priority for a pneumonia vaccination. Having a cholecystectomy a year ago does not qualify as a chronic health condition.

DIF:Understanding/Comprehension REF: 602

KEY:Vaccinations| chronic illness| older adults| health promotion

MSC:Integrated Process: Nursing Process: Implementation

NOT:Client Needs Category: Health Promotion and Maintenance

2.A hospital nurse is participating in a drill during which many clients with inhalation anthrax are being admitted. What drugs should the nurse anticipate administering? **(Select all that apply.)**

a. Amoxicillin (Amoxil)
b. Ciprofloxacin (Cipro)
c. Doxycycline (Vibramycin)
d. Ethambutol (Myambutol)
e. Sulfamethoxazole-trimethoprim (SMX-TMP) (Septra)

ANS: A, B, C

Amoxicillin, ciprofloxacin, and doxycycline are all possible treatments for inhalation anthrax. Ethambutol is used for tuberculosis. SMX-TMP is commonly used for urinary tract infections and other common infections.

DIF:Remembering/Knowledge REF: 613

KEY:Antibiotics| anthrax| emergency preparedness plan

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3.A client in the emergency department is taking rifampin (Rifadin) for tuberculosis. The client reports yellowing of the sclera and skin and bleeding after minor trauma. What laboratory results correlate to this condition? **(Select all that apply.)**

a. Blood urea nitrogen (BUN): 19 mg/dL
b. International normalized ratio (INR): 6.3
c. Prothrombin time: 35 seconds
d. Serum sodium: 130 mEq/L
e. White blood cell (WBC) count: 72,000/mm^3

ANS: B, C

Rifampin can cause liver damage, evidenced by the clients high INR and prothrombin time. The BUN and WBC count are normal. The sodium level is low, but that is not related to this clients problem.

DIF:Analyzing/Analysis REF: 610

KEY:Laboratory values| anti-tuberculosis agents| liver disorders

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4.A client has been diagnosed with an empyema. What interventions should the nurse anticipate providing to this client? **(Select all that apply.)**

a. Assisting with chest tube insertion
b. Facilitating pleural fluid sampling
c. Performing frequent respiratory assessment
d. Providing antipyretics as needed
e. Suctioning deeply every 4 hours

ANS: A, B, C, D

The client with an empyema is often treated with chest tube insertion, which facilitates obtaining samples of the pleural fluid for analysis and re-expands the lungs. The nurse should perform frequent respiratory system assessments. Antipyretic medications are also used. Suction is only used when needed and is not done deeply to prevent tissue injury.

DIF:Applying/Application REF: 612

KEY:Respiratory system| chest tubes| infection| respiratory assessment

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 32: Care of Critically Ill Patients with Respiratory Problems

MULTIPLE CHOICE

1.A nurse answers a call light and finds a client anxious, short of breath, reporting chest pain, and having a blood pressure of 88/52 mm Hg on the cardiac monitor. What action by the nurse takes priority?

a. Assess the clients lung sounds.
b. Notify the Rapid Response Team.
c. Provide reassurance to the client.
d. Take a full set of vital signs.

ANS: B

This client has manifestations of a pulmonary embolism, and the most critical action is to notify the Rapid Response Team for speedy diagnosis and treatment. The other actions are appropriate also but are not the priority.

DIF:Remembering/Knowledge REF: 618

KEY: Critical rescue| Rapid Response Team| thromboembolic event| pulmonary embolism

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2.A client is admitted with a pulmonary embolism (PE). The client is young, healthy, and active and has no known risk factors for PE. What action by the nurse is most appropriate?

a. Encourage the client to walk 5 minutes each hour.
b. Refer the client to smoking cessation classes.
c. Teach the client about factor V Leiden testing.
d. Tell the client that sometimes no cause for disease is found.

ANS: C

Factor V Leiden is an inherited thrombophilia that can lead to abnormal clotting events, including PE. A client with no known risk factors for this disorder should be referred for testing. Encouraging the client to walk is healthy, but is not related to the development of a PE in this case, nor is smoking. Although there are cases of disease where no cause is ever found, this assumption is premature.

DIF:Applying/Application REF: 618

KEY: Pulmonary embolism| thrombotic events| patient education| genetic testing

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3.A client has a pulmonary embolism and is started on oxygen. The student nurse asks why the clients oxygen saturation has not significantly improved. What response by the nurse is best?

a. Breathing so rapidly interferes with oxygenation.
b. Maybe the client has respiratory distress syndrome.
c. The blood clot interferes with perfusion in the lungs.

d. The client needs immediate intubation and mechanical ventilation.

ANS: C

A large blood clot in the lungs will significantly impair gas exchange and oxygenation. Unless the clot is dissolved, this process will continue unabated. Hyperventilation can interfere with oxygenation by shallow breathing, but there is no evidence that the client is hyperventilating, and this is also not the most precise physiologic answer. Respiratory distress syndrome can occur, but this is not as likely. The client may need to be mechanically ventilated, but without concrete data on FiO_2 and SaO_2, the nurse cannot make that judgment.

DIF:Applying/Application REF: 616

KEY: Pulmonary embolism| thromboembolic event| respiratory system| oxygen saturation

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4.A client is on intravenous heparin to treat a pulmonary embolism. The clients most recent partial thromboplastin time (PTT) was 25 seconds. What order should the nurse anticipate?

a. Decrease the heparin rate.
b. Increase the heparin rate.
c. No change to the heparin rate.
d. Stop heparin; start warfarin (Coumadin).

ANS: B

For clients on heparin, a PTT of 1.5 to 2.5 times the normal value is needed to demonstrate the heparin is working. A normal PTT is 25 to 35 seconds, so this clients PTT value is too low. The heparin rate needs to be increased. Warfarin is not indicated in this situation.

DIF:Applying/Application REF: 619

KEY: Pulmonary embolism| thromboembolic events| anticoagulants| laboratory values

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5.A client is hospitalized with a second episode of pulmonary embolism (PE). Recent genetic testing reveals the client has an alteration in the gene *CYP2C19*. What action by the nurse is best?

a. Instruct the client to eliminate all vitamin K from the diet.
b. Prepare preoperative teaching for an inferior vena cava (IVC) filter.
c. Refer the client to a chronic illness support group.
d. Teach the client to use a soft-bristled toothbrush.

ANS: B

Often clients are discharged from the hospital on warfarin (Coumadin) after a PE. However, clients with a variation in the *CYP2C19* gene do not metabolize warfarin well and have higher blood levels and more side effects. This client is a poor candidate for warfarin therapy, and the prescriber will most likely order an IVC

filter device to be implanted. The nurse should prepare to do preoperative teaching on this procedure. It would be impossible to eliminate all vitamin K from the diet. A chronic illness support group may be needed, but this is not the best intervention as it is not as specific to the client as the IVC filter. A soft-bristled toothbrush is a safety measure for clients on anticoagulation therapy.

DIF:Applying/Application REF: 621

KEY: Pulmonary embolism| thromboembolic events| patient education| genetic alterations

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6.A nurse is caring for four clients on intravenous heparin therapy. Which laboratory value possibly indicates that a serious side effect has occurred?

a. Hemoglobin: 14.2 g/dL
b. Platelet count: 82,000/L
c. Red blood cell count: 4.8/mm^3
d. White blood cell count: 8.7/mm^3

ANS: B

This platelet count is low and could indicate heparin-induced thrombocytopenia. The other values are normal for either gender.

DIF:Applying/Application REF: 622

KEY:Anticoagulants| laboratory values

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7.A client appears dyspneic, but the oxygen saturation is 97%. What action by the nurse is best?

a. Assess for other manifestations of hypoxia.
b. Change the sensor on the pulse oximeter.
c. Obtain a new oximeter from central supply.
d. Tell the client to take slow, deep breaths.

ANS: A

Pulse oximetry is not always the most accurate assessment tool for hypoxia as many factors can interfere, producing normal or near-normal readings in the setting of hypoxia. The nurse should conduct a more thorough assessment. The other actions are not appropriate for a hypoxic client.

DIF:Applying/Application REF: 618

KEY: Respiratory assessment| respiratory system| oxygen saturation| hypoxia

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8.A nurse is assisting the health care provider who is intubating a client. The provider has been attempting to intubate for 40 seconds. What action by the nurse takes priority?

a. Ensure the client has adequate sedation.
b. Find another provider to intubate.
c. Interrupt the procedure to give oxygen.
d. Monitor the clients oxygen saturation.

ANS: C

Each intubation attempt should not exceed 30 seconds (15 is preferable) as it causes hypoxia. The nurse should interrupt the intubation attempt and give the client oxygen. The nurse should also have adequate sedation during the procedure and monitor the clients oxygen saturation, but these do not take priority. Finding another provider is not appropriate at this time.

DIF:Applying/Application REF: 628

KEY:Respiratory system| intubation| oxygenation

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9.An intubated clients oxygen saturation has dropped to 88%. What action by the nurse takes priority?

a. Determine if the tube is kinked.
b. Ensure all connections are patent.
c. Listen to the clients lung sounds.
d. Suction the endotracheal tube.

ANS: C

When an intubated client shows signs of hypoxia, check for DOPE: displaced tube (most common cause), obstruction (often by secretions), pneumothorax, and equipment problems. The nurse listens for equal, bilateral breath sounds first to determine if the endotracheal tube is still correctly placed. If this assessment is normal, the nurse would follow the mnemonic and assess the patency of the tube and connections and perform suction.

DIF:Applying/Application REF: 629

KEY: Mechanical ventilation| respiratory assessment| equipment safety| critical rescue

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10.A client is on a ventilator and is sedated. What care may the nurse delegate to the unlicensed assistive personnel (UAP)?

a. Assess the client for sedation needs.
b. Get family permission for restraints.
c. Provide frequent oral care per protocol.
d. Use nonverbal pain assessment tools.

ANS: C

The client on mechanical ventilation needs frequent oral care, which can be delegated to the UAP. The other actions fall within the scope of practice of the nurse.

DIF:Applying/Application REF: 632

KEY: Mechanical ventilation| oral care| delegation| unlicensed assistive personnel (UAP)

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11.A nurse is caring for a client on mechanical ventilation. When double-checking the ventilator settings with the respiratory therapist, what should the nurse ensure as a priority?

a. The client is able to initiate spontaneous breaths.
b. The inspired oxygen has adequate humidification.
c. The upper peak airway pressure limit alarm is off.
d. The upper peak airway pressure limit alarm is on.

ANS: D

The upper peak airway pressure limit alarm will sound when the airway pressure reaches a preset maximum. This is critical to prevent damage to the lungs. Alarms should never be turned off. Initiating spontaneous breathing is important for some modes of ventilation but not others. Adequate humidification is important but does not take priority over preventing injury.

DIF:Applying/Application REF: 632

KEY:Mechanical ventilation| respiratory system| equipment safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12.A nurse is caring for a client on mechanical ventilation and finds the client agitated and thrashing about. What action by the nurse is most appropriate?

a. Assess the cause of the agitation.
b. Reassure the client that he or she is safe.
c. Restrain the clients hands.
d. Sedate the client immediately.

ANS: A

The nurse needs to determine the cause of the agitation. The inability to communicate often makes clients anxious, even to the point of panic. Pain and confusion can also cause agitation. Once the nurse determines the cause of the agitation, he or she can implement measures to relieve the underlying cause. Reassurance is also important but may not address the etiology of the agitation. Restraints and more sedation may be necessary, but not as a first step.

DIF:Applying/Application REF: 631

KEY: Mechanical ventilation| psychosocial response| anxiety| communication| nursing assessment MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Psychosocial Integrity

13.A nurse is preparing to admit a client on mechanical ventilation from the emergency department. What action by the nurse takes priority?

a. Assessing that the ventilator settings are correct
b. Ensuring there is a bag-valve-mask in the room
c. Obtaining personal protective equipment
d. Planning to suction the client upon arrival to the room

ANS: B

Having a bag-valve-mask device is critical in case the client needs manual breathing. The respiratory therapist is usually primarily responsible for setting up the ventilator, although the nurse should know and check the settings. Personal protective equipment is important, but ensuring client safety takes priority. The client may or may not need suctioning on arrival.

DIF:Applying/Application REF: 628

KEY:Mechanical ventilation| patient safety| critical rescue

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14.A client is on mechanical ventilation and the clients spouse wonders why ranitidine (Zantac) is needed since the client only has lung problems. What response by the nurse is best?

a. It will increase the motility of the gastrointestinal tract.
b. It will keep the gastrointestinal tract functioning normally.
c. It will prepare the gastrointestinal tract for enteral feedings.
d. It will prevent ulcers from the stress of mechanical ventilation.

ANS: D

Stress ulcers occur in many clients who are receiving mechanical ventilation, and often prophylactic medications are used to prevent them. Frequently used medications include antacids, histamine blockers, and proton pump inhibitors. Zantac is a histamine blocking agent.

DIF:Understanding/Comprehension REF: 634

KEY:Mechanical ventilation| histamine blocker| communication

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15.A client has been brought to the emergency department with a life-threatening chest injury. What action by the nurse takes priority?

a. Apply oxygen at 100%.
b. Assess the respiratory rate.
c. Ensure a patent airway.
d. Start two large-bore IV lines.

ANS: C

The priority for any chest trauma client is airway, breathing, circulation. The nurse first ensures the client has a patent airway. Assessing respiratory rate and applying oxygen are next, followed by inserting IVs.

DIF:Remembering/Knowledge REF: 635

KEY: Emergency nursing| primary survey| medical emergencies| trauma| respiratory assessment MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16.A client is being discharged soon on warfarin (Coumadin). What menu selection for dinner indicates the client needs more education regarding this medication?

a. Hamburger and French fries
b. Large chefs salad and muffin
c. No selection; spouse brings pizza
d. Tuna salad sandwich and chips

ANS: B

Warfarin works by inhibiting the synthesis of vitamin Kdependent clotting factors. Foods high in vitamin K thus interfere with its action and need to be eaten in moderate, consistent amounts. The chefs salad most likely has too many leafy green vegetables, which contain high amounts of vitamin K. The other selections, while not particularly healthy, will not interfere with the medications mechanism of action.

DIF:Evaluating/Synthesis REF: 620

KEYatient education| anticoagulants| nursing process evaluation

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

17.A nurse is teaching a client about warfarin (Coumadin). What assessment finding by the nurse indicates a possible barrier to self-management?

a. Poor visual acuity
b. Strict vegetarian
c. Refusal to stop smoking
d. Wants weight loss surgery

ANS: B

Warfarin works by inhibiting the synthesis of vitamin Kdependent clotting factors. Foods high in vitamin K thus interfere with its action and need to be eaten in moderate, consistent amounts. A vegetarian may have trouble maintaining this diet. The nurse should explore this possibility with the client. The other options are not related.

DIF:Applying/Application REF: 620

KEY:Anticoagulants| patient education| medication safety

MSC:Integrated Process: Nursing Process: Assessment

NOT:Client Needs Category: Health Promotion and Maintenance

18.A student nurse is preparing to administer enoxaparin (Lovenox) to a client. What action by the student requires immediate intervention by the supervising nurse?

a. Assessing the clients platelet count
b. Choosing an 18-gauge, 2-inch needle
c. Not aspirating prior to injection
d. Swabbing the injection site with alcohol

ANS: B

Enoxaparin is given subcutaneously, so the 18-gauge, 2-inch needle is too big. The other actions are appropriate.

DIF:Applying/Application REF: 620

KEY:Anticoagulants| medication administration

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

19.A client in the emergency department has several broken ribs. What care measure will best promote comfort?

a. Allowing the client to choose the position in bed
b. Humidifying the supplemental oxygen
c. Offering frequent, small drinks of water
d. Providing warmed blankets

ANS: A

Allow the client with respiratory problems to assume a position of comfort if it does not interfere with care. Often the client will choose a more upright position, which also improves oxygenation. The other options are less effective comfort measures.

DIF:Applying/Application REF: 625

KEY: Respiratory system| nonpharmacologic pain management| comfort measures

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

20.A client has been diagnosed with a very large pulmonary embolism (PE) and has a dropping blood pressure. What medication should the nurse anticipate the client will need as the priority?

a. Alteplase (Activase)
b. Enoxaparin (Lovenox)
c. Unfractionated heparin
d. Warfarin sodium (Coumadin)

ANS: A

Activase is a clot-busting agent indicated in large PEs in the setting of hemodynamic instability. The nurse knows this drug is the priority, although heparin may be started initially. Enoxaparin and warfarin are not indicated in this setting.

DIF:Remembering/Knowledge REF: 619

KEYulmonary embolism| thromboembolic event| anticoagulants

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

21.A client is brought to the emergency department after sustaining injuries in a severe car crash. The clients chest wall does not appear to be moving normally with respirations, oxygen saturation is 82%, and the client is cyanotic. What action by the nurse is the priority?

a. Administer oxygen and reassess.
b. Auscultate the clients lung sounds.
c. Facilitate a portable chest x-ray.
d. Prepare to assist with intubation.

ANS: D

This client has manifestations of flail chest and, with the other signs, needs to be intubated and mechanically ventilated immediately. The nurse does not have time to administer oxygen and wait to reassess, or to listen to lung sounds. A chest x-ray will be taken after the client is intubated.

DIF:Applying/Application REF: 627

KEY: Trauma| respiratory system| respiratory disorders| mechanical ventilation

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

22.A student nurse asks for an explanation of refractory hypoxemia. What answer by the nurse instructor is best?

a. It is chronic hypoxemia that accompanies restrictive airway disease.
b. It is hypoxemia from lung damage due to mechanical ventilation.
c. It is hypoxemia that continues even after the client is weaned from oxygen.
d. It is hypoxemia that persists even with 100% oxygen administration.

ANS: D

Refractory hypoxemia is hypoxemia that persists even with the administration of 100% oxygen. It is a cardinal sign of acute respiratory distress syndrome. It does not accompany restrictive airway disease and is not caused by the use of mechanical ventilation or by being weaned from oxygen.

DIF:Understanding/Comprehension REF: 625

KEY:Respiratory disorders| respiratory system| pathophysiology

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

23.A nurse is caring for a client on the medical stepdown unit. The following data are related to this client:

Subjective Information	Laboratory Analysis	Physical Assessment
Shortness of breath for 20 minutes	pH: 7.12	Pulse: 120 beats/min
Feels frightened	$PaCO_2$: 28 mm Hg	Respiratory rate: 34 breaths/min
Cant catch my breath	PaO_2: 58 mm Hg	Blood pressure 158/92 mm Hg
	SaO_2: 88%	Lungs have crackles

What action by the nurse is most appropriate?

a. Call respiratory therapy for a breathing treatment.
b. Facilitate a STAT pulmonary angiography.
c. Prepare for immediate endotracheal intubation.
d. Prepare to administer intravenous anticoagulants.

ANS: B

This client has manifestations of pulmonary embolism (PE); however, many conditions can cause the clients presentation. The gold standard for diagnosing a PE is pulmonary angiography. The nurse should facilitate this test as soon as possible. The client does not have wheezing, so a respiratory treatment is not needed. The client is not unstable enough to need intubation and mechanical ventilation. IV anticoagulants are not given without a diagnosis of PE.

DIF:Analyzing/Analysis REF: 618

KEY: Pulmonary embolism| thromboembolic event| laboratory values| respiratory system| clotting MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1.A nurse is caring for five clients. For which clients would the nurse assess a high risk for developing a pulmonary embolism (PE)? **(Select all that apply.)**

a. Client who had a reaction to contrast dye yesterday
b. Client with a new spinal cord injury on a rotating bed
c. Middle-aged man with an exacerbation of asthma
d. Older client who is 1-day post hip replacement surgery
e. Young obese client with a fractured femur

ANS: B, D, E

Conditions that place clients at higher risk of developing PE include prolonged immobility, central venous catheters, surgery, obesity, advancing age, conditions that increase blood clotting, history of thromboembolism, smoking, pregnancy, estrogen therapy, heart failure, stroke, cancer (particularly lung or prostate), and trauma. A contrast dye reaction and asthma pose no risk for PE.

DIF:Remembering/Knowledge REF: 617

KEY: Pulmonary embolism| nursing assessment| clotting| thromboembolic event

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2.When working with women who are taking hormonal birth control, what health promotion measures should the nurse teach to prevent possible pulmonary embolism (PE)? **(Select all that apply.)**

a. Avoid drinking alcohol.
b. Eat more omega-3 fatty acids.
c. Exercise on a regular basis.
d. Maintain a healthy weight.
e. Stop smoking cigarettes.

ANS: C, D, E

Health promotion measures for clients to prevent thromboembolic events such as PE include maintaining a healthy weight, exercising on a regular basis, and not smoking. Avoiding alcohol and eating more foods containing omega-3 fatty acids are heart-healthy actions but do not relate to the prevention of PE.

DIF:Understanding/Comprehension REF: 617

KEYulmonary embolism| patient education| clotting| thromboembolic event| lifestyle choicesMSC:Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

3.A client with a new pulmonary embolism (PE) is anxious. What nursing actions are most appropriate? **(Select all that apply.)**

a. Acknowledge the frightening nature of the illness.
b. Delegate a back rub to the unlicensed assistive personnel (UAP).
c. Give simple explanations of what is happening.
d. Request a prescription for antianxiety medication.
e. Stay with the client and speak in a quiet, calm voice.

ANS: A, B, C, E

Clients with PEs are often anxious. The nurse can acknowledge the clients fears, delegate comfort measures, give simple explanations the client will understand, and stay with the client. Using a calm, quiet voice is also reassuring. Sedatives and antianxiety medications are not used routinely because they can contribute to hypoxia. If the clients anxiety is interfering with diagnostic testing or treatment, they can be used, but there is no evidence that this is the case.

DIF:Applying/Application REF: 622

KEY: Pulmonary embolism| thromboembolic events| psychosocial response| anxiety| support MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Psychosocial Integrity

4.The nurse caring for mechanically ventilated clients uses best practices to prevent ventilator-associated

pneumonia. What actions are included in this practice? **(Select all that apply.)**

a. Adherence to proper hand hygiene
b. Administering anti-ulcer medication
c. Elevating the head of the bed
d. Providing oral care per protocol
e. Suctioning the client on a regular schedule

ANS: A, B, C, D

The ventilator bundle is a group of care measures to prevent ventilator-associated pneumonia. Actions in the bundle include using proper hand hygiene, giving anti-ulcer medications, elevating the head of the bed, providing frequent oral care per policy, preventing aspiration, and providing pulmonary hygiene measures. Suctioning is done as needed.

DIF:Remembering/Knowledge REF: 634

KEY: Mechanical ventilation| respiratory system| core measures| infection control| pneumonia MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5.A nurse is caring for a client who is on mechanical ventilation. What actions will promote comfort in this client? **(Select all that apply.)**

a. Allow visitors at the clients bedside.
b. Ensure the client can communicate if awake.
c. Keep the television tuned to a favorite channel.
d. Provide back and hand massages when turning.
e. Turn the client every 2 hours or more.

ANS: A, B, D, E

There are many basic care measures that can be employed for the client who is on a ventilator. Allowing visitation, providing a means of communication, massaging the clients skin, and routinely turning and repositioning the client are some of them. Keeping the TV on will interfere with sleep and rest.

DIF:Applying/Application REF: 632

KEY:Comfort measures| mechanical ventilation

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6.The nurse caring for mechanically ventilated clients knows that older adults are at higher risk for weaning failure. What age-related changes contribute to this? **(Select all that apply.)**

a. Chest wall stiffness
b. Decreased muscle strength
c. Inability to cooperate
d. Less lung elasticity
e. Poor vision and hearing

ANS: A, B, D

Age-related changes that increase the difficulty of weaning older adults from mechanical ventilation include increased stiffness of the chest wall, decreased muscle strength, and less elasticity of lung tissue. Not all older adults have an inability to cooperate or poor sensory acuity.

DIF:Remembering/Knowledge REF: 635

KEY:Mechanical ventilation| older adult

MSC:Integrated Process: Nursing Process: Analysis

NOT:Client Needs Category: Health Promotion and Maintenance

COMPLETION

1.A 242-pound client is being mechanically ventilated. To prevent lung injury, what setting should the nurse anticipate for tidal volume? (*Record your answer using a whole number.*) ___ mL

ANS:

660 mL

A low tidal volume of 6 mL/kg is used to prevent lung injury.

242 pounds = 110 kg.

110 kg 6 mL/kg = 660 mL.

DIF:Applying/Application REF: 627

KEY:Mechanical ventilation| respiratory system| injury prevention

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 33: Assessment of the Cardiovascular System

MULTIPLE CHOICE

1. A nurse assesses a client who had a myocardial infarction and is hypotensive. Which additional assessment finding should the nurse expect?
a. Heart rate of 120 beats/min
b. Cool, clammy skin
c. Oxygen saturation of 90%
d. Respiratory rate of 8 breaths/min

ANS: A
When a client experiences hypotension, baroreceptors in the aortic arch sense a pressure decrease in the vessels. The parasympathetic system responds by lessening the inhibitory effect on the sinoatrial node. This results in an increase in heart rate and respiratory rate. This tachycardia is an early response and is seen even when blood pressure is not critically low. An increased heart rate and respiratory rate will compensate for the low blood pressure and maintain oxygen saturations and perfusion. The client may not be able to compensate for long, and decreased oxygenation and cool, clammy skin will occur later.

DIF: Applying/Application REF: 652
KEY: Coronary perfusion| hemodynamics
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse assesses a client after administering a prescribed beta blocker. Which assessment should the nurse expect to find?
a. Blood pressure increased from 98/42 mm Hg to 132/60 mm Hg
b. Respiratory rate decreased from 25 breaths/min to 14 breaths/min
c. Oxygen saturation increased from 88% to 96%
d. Pulse decreased from 100 beats/min to 80 beats/min

ANS: D
Beta blockers block the stimulation of beta1-adrenergic receptors. They block the sympathetic (fight-or-flight) response and decrease the heart rate (HR). The beta blocker will decrease HR and blood pressure, increasing ventricular filling time. It usually does not have effects on beta2-adrenergic receptor sites. Cardiac output will drop because of decreased HR.

DIF: Applying/Application REF: 644
KEY: Beta blocker| medication
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A nurse assesses clients on a medical-surgical unit. Which client should the nurse identify as having the greatest risk for cardiovascular disease?
a. An 86-year-old man with a history of asthma
b. A 32-year-old Asian-American man with colorectal cancer
c. A 45-year-old American Indian woman with diabetes mellitus
d. A 53-year-old postmenopausal woman who is on hormone therapy

ANS: C
The incidence of coronary artery disease and hypertension is higher in American Indians than in whites or Asian Americans. Diabetes mellitus increases the risk for hypertension and coronary artery disease in people of any race or ethnicity. Asthma, colorectal cancer, and hormone therapy do not increase risk for cardiovascular disease.

DIF: Understanding/Comprehension REF: 646
KEY: Health screening
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A nurse assesses an older adult client who has multiple chronic diseases. The clients heart rate is 48 beats/min. Which action should the nurse take first?
a. Document the finding in the chart.
b. Initiate external pacing.
c. Assess the clients medications.
d. Administer 1 mg of atropine.

ANS: C
Pacemaker cells in the conduction system decrease in number as a person ages, resulting in bradycardia. The nurse should check the medication reconciliation for medications that might cause such a drop in heart rate, then should inform the health care provider. Documentation is important, but it is not the priority action. The heart rate is not low enough for atropine or an external pacemaker to be needed.

DIF: Applying/Application REF: 647
KEY: Medication| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. An emergency room nurse obtains the health history of a client. Which statement by the client should alert the nurse to the occurrence of heart failure?
a. I get short of breath when I climb stairs.
b. I see halos floating around my head.
c. I have trouble remembering things.
d. I have lost weight over the past month.

ANS: A
Dyspnea on exertion is an early manifestation of heart failure and is associated with an activity such as stair climbing. The other findings are not specific to early occurrence of heart failure.

DIF: Applying/Application REF: 649
KEY: Health screening| heart failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

6. A nurse obtains the health history of a client who is newly admitted to the medical unit. Which statement by the client should alert the nurse to the presence of edema?
a. I wake up to go to the bathroom at night.
b. My shoes fit tighter by the end of the day.
c. I seem to be feeling more anxious lately.
d. I drink at least eight glasses of water a day.

ANS: B
Weight gain can result from fluid accumulation in the interstitial spaces. This is known as edema. The nurse should note whether the client feels that his or her shoes or rings are tight, and should observe, when present, an indentation around the leg where the socks end. The other answers do not describe edema.

DIF: Applying/Application REF: 649
KEY: Heart failure| vascular perfusion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse assesses an older adult client who is experiencing a myocardial infarction. Which clinical manifestation should the nurse expect?
a. Excruciating pain on inspiration
b. Left lateral chest wall pain
c. Disorientation and confusion
d. Numbness and tingling of the arm

ANS: C
In older adults, disorientation or confusion may be the major manifestation of myocardial infarction caused by poor cardiac output. Pain manifestations and numbness and tingling of the arm could also be related to the myocardial infarction. However, the nurse should be more concerned about the new onset of disorientation or confusion caused by decreased perfusion.

DIF: Applying/Application REF: 651
KEY: Coronary perfusion| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. A nurse assesses a client 2 hours after a cardiac angiography via the left femoral artery. The nurse notes that the left pedal pulse is weak. Which action should the nurse take?
a. Elevate the leg and apply a sandbag to the entrance site.
b. Increase the flow rate of intravenous fluids.
c. Assess the color and temperature of the left leg.
d. Document the finding as left pedal pulse of +1/4.

ANS: C
Loss of a pulse distal to an angiography entry site is serious, indicating a possible arterial obstruction. The pulse may be faint because of edema. The left pulse should be compared with the right, and pulses should be compared with previous assessments, especially before the procedure. Assessing color (pale, cyanosis) and temperature (cool, cold) will identify a decrease in circulation. Once all peripheral and vascular assessment data are acquired, the primary health care provider should be notified. Simply documenting the findings is inappropriate. The leg should be positioned below the level of the heart or dangling to increase blood flow to the distal portion of the leg. Increasing intravenous fluids will not address the clients problem.

DIF: Applying/Application REF: 658
KEY: Assessment/diagnostic examination| vascular perfusion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse assesses a client who is recovering after a left-sided cardiac catheterization. Which assessment finding requires immediate intervention?
a. Urinary output less than intake
b. Bruising at the insertion site
c. Slurred speech and confusion
d. Discomfort in the left leg

ANS: C
A left-sided cardiac catheterization specifically increases the risk for a cerebral vascular accident. A change in neurologic status needs to be acted on immediately. Discomfort and bruising are expected at the site. If intake decreases, a client can become dehydrated because of dye excretion. The second intervention would be to increase the clients fluid status. Neurologic changes would take priority.

DIF: Applying/Application REF: 658
KEY: Assessment/diagnostic examination| vascular perfusion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse assesses a client who is scheduled for a cardiac catheterization. Which assessment should the nurse complete prior to this procedure?
a. Clients level of anxiety
b. Ability to turn self in bed
c. Cardiac rhythm and heart rate
d. Allergies to iodine-based agents

ANS: D

Before the procedure, the nurse should ascertain whether the client has an allergy to iodine-containing preparations, such as seafood or local anesthetics. The contrast medium used during the procedure is iodine based. This allergy can cause a life-threatening reaction, so it is a high priority. Second, it is important for the nurse to assess anxiety, mobility, and baseline cardiac status.

DIF: Remembering/Knowledge REF: 657
KEY: Assessment/diagnostic examination| allergies| patient safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A nurse cares for a client who is prescribed magnetic resonance imaging (MRI) of the heart. The clients health history includes a previous myocardial infarction and pacemaker implantation. Which action should the nurse take?
a. Schedule an electrocardiogram just before the MRI.
b. Notify the health care provider before scheduling the MRI.
c. Call the physician and request a laboratory draw for cardiac enzymes.
d. Instruct the client to increase fluid intake the day before the MRI.

ANS: B
The magnetic fields of the MRI can deactivate the pacemaker. The nurse should call the health care provider and report that the client has a pacemaker so the provider can order other diagnostic tests. The client does not need an electrocardiogram, cardiac enzymes, or increased fluids.

DIF: Applying/Application REF: 661
KEY: Assessment/diagnostic examination| patient safety
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. A nurse assesses a client who is recovering from a myocardial infarction. The clients pulmonary artery pressure reading is 25/12 mm Hg. Which action should the nurse take first?
a. Compare the results with previous pulmonary artery pressure readings.
b. Increase the intravenous fluid rate because these readings are low.
c. Immediately notify the health care provider of the elevated pressures.
d. Document the finding in the clients chart as the only action.

ANS: A
Normal pulmonary artery pressures range from 15 to 26 mm Hg for systolic and from 5 to 15 mm Hg for diastolic. Although this clients readings are within normal limits, the nurse needs to assess any trends that may indicate a need for medical treatment to prevent complications. There is no need to increase intravenous fluids or notify the provider.

DIF: Applying/Application REF: 652
KEY: Coronary perfusion| assessment/diagnostic examination| vascular perfusion
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A nurse cares for a client who has an 80% blockage of the right coronary artery (RCA) and is scheduled for bypass surgery. Which intervention should the nurse be prepared to implement while this client waits for surgery?
a. Administration of IV furosemide (Lasix)
b. Initiation of an external pacemaker
c. Assistance with endotracheal intubation
d. Placement of central venous access

ANS: B
The RCA supplies the right atrium, the right ventricle, the inferior portion of the left ventricle, and the atrioventricular (AV) node. It also supplies the sinoatrial node in 50% of people. If the client totally occludes the RCA, the AV node would not function and the client would go into heart block, so emergency pacing should be available for the client. Furosemide, intubation, and central venous access will not address the

primary complication of RCA occlusion, which is AV node malfunction.

DIF: Applying/Application REF: 642
KEY: Coronary perfusion| assessment/diagnostic examination| cardiac electrical conduction
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. A nurse teaches a client with diabetes mellitus and a body mass index of 42 who is at high risk for coronary artery disease. Which statement related to nutrition should the nurse include in this clients teaching?
a. The best way to lose weight is a high-protein, low-carbohydrate diet.
b. You should balance weight loss with consuming necessary nutrients.
c. A nutritionist will provide you with information about your new diet.
d. If you exercise more frequently, you wont need to change your diet.

ANS: B
Clients at risk for cardiovascular diseases should follow the American Heart Association guidelines to combat obesity and improve cardiac health. The nurse should encourage the client to eat vegetables, fruits, unrefined whole-grain products, and fat-free dairy products while losing weight. High-protein food items are often high in fat and calories. Although the nutritionist can assist with client education, the nurse should include nutrition education and assist the client to make healthy decisions. Exercising and eating nutrient-rich foods are both important components in reducing cardiovascular risk.

DIF: Applying/Application REF: 647
KEY: Nutrition| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

15. A nurse cares for a client who has advanced cardiac disease and states, I am having trouble sleeping at night. How should the nurse respond?
a. I will consult the provider to prescribe a sleep study to determine the problem.
b. You become hypoxic while sleeping; oxygen therapy via nasal cannula will help.
c. A continuous positive airway pressure, or CPAP, breathing mask will help you breathe at night.
d. Use pillows to elevate your head and chest while you are sleeping.

ANS: D
The client is experiencing orthopnea (shortness of breath while lying flat). The nurse should teach the client to elevate the head and chest with pillows or sleep in a recliner. A sleep study is not necessary to diagnose this client. Oxygen and CPAP will not help a client with orthopnea.

DIF: Understanding/Comprehension REF: 649
KEY: Heart failure| respiratory distress/failure| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

16. A nurse cares for a client who is recovering from a myocardial infarction. The client states, I will need to stop eating so much chili to keep that indigestion pain from returning. How should the nurse respond?
a. Chili is high in fat and calories; it would be a good idea to stop eating it.
b. The provider has prescribed an antacid for you to take every morning.
c. What do you understand about what happened to you?
d. When did you start experiencing this indigestion?

ANS: C
Clients who experience myocardial infarction often respond with denial, which is a defense mechanism. The nurse should ask the client what he or she thinks happened, or what the illness means to him or her. The other responses do not address the clients misconception about recent pain and the cause of that pain.

DIF: Applying/Application REF: 654
KEY: Coronary perfusion| coping MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

17. A nurse prepares a client for coronary artery bypass graft surgery. The client states, I am afraid I might die. How should the nurse respond?
a. This is a routine surgery and the risk of death is very low.
b. Would you like to speak with a chaplain prior to surgery?
c. Tell me more about your concerns about the surgery.
d. What support systems do you have to assist you?

ANS: C
The nurse should discuss the clients feelings and concerns related to the surgery. The nurse should not provide false hope or push the clients concerns off on the chaplain. The nurse should address support systems after addressing the clients current issue.

DIF: Applying/Application REF: 661
KEY: Assessment/diagnostic examination| coping| anxiety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

18. An emergency department nurse triages clients who present with chest discomfort. Which client should the nurse plan to assess first?
a. A 42-year-old female who describes her pain as a dull ache with numbness in her fingers
b. A 49-year-old male who reports moderate pain that is worse on inspiration
c. A 53-year-old female who reports substernal pain that radiates to her abdomen
d. A 58-year-old male who describes his pain as intense stabbing that spreads across his chest

ANS: D
All clients who have chest pain should be assessed more thoroughly. To determine which client should be seen first, the nurse must understand common differences in pain descriptions. Intense stabbing, vise-like substernal pain that spreads through the clients chest, arms, jaw, back, or neck is indicative of a myocardial infarction. The nurse should plan to see this client first to prevent cardiac cell death. A dull ache with numbness in the fingers is consistent with anxiety. Pain that gets worse with inspiration is usually related to a pleuropulmonary problem. Pain that spreads to the abdomen is often associated with an esophageal-gastric problem, especially when this pain is experienced by a male client. Female clients may experience abdominal discomfort with a myocardial event. Although clients with anxiety, pleuropulmonary, and esophageal-gastric problems should be seen, they are not a higher priority than myocardial infarction.

DIF: Applying/Application REF: 658
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nurse auscultated heart tones on an older adult client. Which action should the nurse take based on heart tones heard?
(Click the media button to hear the audio clip.)
a. Administer a diuretic.
b. Document the finding.
c. Decrease the IV flow rate.
d. Evaluate the clients medications.

ANS: B
The sound heard is an atrial gallop S4. An atrial gallop may be heard in older clients because of a stiffened ventricle. The nurse should document the finding, but no other intervention is needed at this time.

DIF: Applying/Application REF: 653
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

20. A nurse assesses a client who has aortic regurgitation. In which location in the illustration shown below should the nurse auscultate to best hear a cardiac murmur related to aortic regurgitation?

a. Location A
b. Location B
c. Location C
d. Location D

ANS: A
The aortic valve is auscultated in the second intercostal space just to the right of the sternum.

DIF: Applying/Application REF: 653
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

MULTIPLE RESPONSE

1. A nurse is caring for a client with a history of renal insufficiency who is scheduled for a cardiac catheterization. Which actions should the nurse take prior to the catheterization? (Select all that apply.)
a. Assess for allergies to iodine.
b. Administer intravenous fluids.
c. Assess blood urea nitrogen (BUN) and creatinine results.
d. Insert a Foley catheter.
e. Administer a prophylactic antibiotic.
f. Insert a central venous catheter.

ANS: A, B, C
If the client has kidney disease (as indicated by BUN and creatinine results), fluids and Mucomyst may be given 12 to 24 hours before the procedure for renal protection. The client should be assessed for allergies to iodine, including shellfish; the contrast medium used during the catheterization contains iodine. A Foley catheter and central venous catheter are not required for the procedure and would only increase the clients risk for infection. Prophylactic antibiotics are not administered prior to a cardiac catheterization.

DIF: Applying/Application REF: 657
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. An emergency room nurse assesses a female client. Which assessment findings should alert the nurse to request a prescription for an electrocardiogram? (Select all that apply.)
a. Hypertension
b. Fatigue despite adequate rest
c. Indigestion
d. Abdominal pain
e. Shortness of breath

ANS: B, C, E
Women may not have chest pain with myocardial infarction, but may feel discomfort or indigestion. They often present with a triad of symptomsindigestion or feeling of abdominal fullness, feeling of chronic fatigue despite adequate rest, and feeling unable to catch their breath. Frequently, women are not diagnosed and therefore are not treated adequately. Hypertension and abdominal pain are not associated with acute coronary syndrome.

DIF: Applying/Application REF: 649
KEY: Cardiac electrical conduction
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse assesses a client who is recovering after a coronary catheterization. Which assessment findings in the first few hours after the procedure require immediate action by the nurse? (Select all that apply.)
a. Blood pressure of 140/88 mm Hg

b. Serum potassium of 2.9 mEq/L
c. Warmth and redness at the site
d. Expanding groin hematoma
e. Rhythm changes on the cardiac monitor

ANS: B, D, E
In the first few hours postprocedure, the nurse monitors for complications such as bleeding from the insertion site, hypotension, acute closure of the vessel, dye reaction, hypokalemia, and dysrhythmias. The clients blood pressure is slightly elevated but does not need immediate action. Warmth and redness at the site would indicate an infection, but this would not be present in the first few hours.

DIF: Applying/Application REF: 657
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse reviews a clients laboratory results. Which findings should alert the nurse to the possibility of atherosclerosis? (Select all that apply.)
a. Total cholesterol: 280 mg/dL
b. High-density lipoprotein cholesterol: 50 mg/dL
c. Triglycerides: 200 mg/dL
d. Serum albumin: 4 g/dL
e. Low-density lipoprotein cholesterol: 160 mg/dL

ANS: A, C, E
A lipid panel is often used to screen for cardiovascular risk. Total cholesterol, triglycerides, and low-density lipoprotein cholesterol levels are all high, indicating higher risk for cardiovascular disease. High-density lipoprotein cholesterol is within the normal range for both males and females. Serum albumin is not assessed for atherosclerosis.

DIF: Applying/Application REF: 650
KEY: Assessment/diagnostic examination| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse prepares a client for a pharmacologic stress echocardiogram. Which actions should the nurse take when preparing this client for the procedure? (Select all that apply.)
a. Assist the provider to place a central venous access device.
b. Prepare for continuous blood pressure and pulse monitoring.
c. Administer the clients prescribed beta blocker.
d. Give the client nothing by mouth 3 to 6 hours before the procedure.
e. Explain to the client that dobutamine will simulate exercise for this examination.

ANS: B, D, E
Clients receiving a pharmacologic stress echocardiogram will need peripheral venous access and continuous blood pressure and pulse monitoring. The client must be NPO 3 to 6 hours prior to the procedure. Education about dobutamine, which will be administered during the procedure, should be performed. Beta blockers are often held prior to the procedure.

DIF: Applying/Application REF: 660
KEY: Assessment/diagnostic examination| medication
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse cares for a client who is recovering from a right-sided heart catheterization. For which complications of this procedure should the nurse assess? (Select all that apply.)
a. Thrombophlebitis
b. Stroke
c. Pulmonary embolism

d. Myocardial infarction
e. Cardiac tamponade

ANS: A, C, E
Complications from a right-sided heart catheterization include thrombophlebitis, pulmonary embolism, and vagal response. Cardiac tamponade is a risk of both right- and left-sided heart catheterizations. Stroke and myocardial infarction are complications of left-sided heart catheterizations.

DIF: Remembering/Knowledge REF: 657
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

COMPLETION

1. A nurse prepares a client with acute renal insufficiency for a cardiac catheterization. The provider prescribes 0.9% normal saline to infuse at 125 mL/hr for renal protection. The nurse obtains gravity tubing with a drip rate of 15 drops/mL. At what rate (drops/min) should the nurse infuse the fluids? (Record your answer using a whole number, and rounding to the nearest drop.) _____ drops/min

ANS:
31 drops/min

DIF: Applying/Application REF: 655
KEY: Medication administration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 34: Care of Patients with Dysrhythmias

MULTIPLE CHOICE

1. A nurse assesses a clients electrocardiograph tracing and observes that not all QRS complexes are preceded by a P wave. How should the nurse interpret this observation?
a. The client has hyperkalemia causing irregular QRS complexes.
b. Ventricular tachycardia is overriding the normal atrial rhythm.
c. The clients chest leads are not making sufficient contact with the skin.
d. Ventricular and atrial depolarizations are initiated from different sites.

ANS: D
Normal rhythm shows one P wave preceding each QRS complex, indicating that all depolarization is initiated at the sinoatrial node. QRS complexes without a P wave indicate a different source of initiation of depolarization. This finding on an electrocardiograph tracing is not an indication of hyperkalemia, ventricular tachycardia, or disconnection of leads.

DIF: Understanding/Comprehension REF: 664
KEY: Cardiac electrical conduction
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse cares for a client who has a heart rate averaging 56 beats/min with no adverse symptoms. Which activity modification should the nurse suggest to avoid further slowing of the heart rate?
a. Make certain that your bath water is warm.
b. Avoid straining while having a bowel movement.
c. Limit your intake of caffeinated drinks to one a day.
d. Avoid strenuous exercise such as running.

ANS: B
Bearing down strenuously during a bowel movement is one type of Valsalva maneuver, which stimulates the vagus nerve and results in slowing of the heart rate. Such a response is not desirable in a person who has bradycardia. The other instructions are not appropriate for this condition.

DIF: Applying/Application REF: 678
KEY: Functional ability
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse is assessing clients on a medical-surgical unit. Which client should the nurse identify as being at greatest risk for atrial fibrillation?
a. A 45-year-old who takes an aspirin daily
b. A 50-year-old who is post coronary artery bypass graft surgery
c. A 78-year-old who had a carotid endarterectomy
d. An 80-year-old with chronic obstructive pulmonary disease

ANS: B
Atrial fibrillation occurs commonly in clients with cardiac disease and is a common occurrence after coronary artery bypass graft surgery. The other conditions do not place these clients at higher risk for atrial fibrillation.

DIF: Applying/Application REF: 681
KEY: Health screening| cardiac electrical conduction
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A nurse assesses a client with atrial fibrillation. Which manifestation should alert the nurse to the possibility of a serious complication from this condition?
a. Sinus tachycardia
b. Speech alterations

c. Fatigue
d. Dyspnea with activity

ANS: B
Clients with atrial fibrillation are at risk for embolic stroke. Evidence of embolic events includes changes in mentation, speech, sensory function, and motor function. Clients with atrial fibrillation often have a rapid ventricular response as a result. Fatigue is a nonspecific complaint. Clients with atrial fibrillation often have dyspnea as a result of the decreased cardiac output caused by the rhythm disturbance.

DIF: Applying/Application REF: 681
KEY: Cardiac electrical conduction| vascular perfusion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse evaluates prescriptions for a client with chronic atrial fibrillation. Which medication should the nurse expect to find on this clients medication administration record to prevent a common complication of this condition?
a. Sotalol (Betapace)
b. Warfarin (Coumadin)
c. Atropine (Sal-Tropine)
d. Lidocaine (Xylocaine)

ANS: B
Atrial fibrillation puts clients at risk for developing emboli. Clients at risk for emboli are treated with anticoagulants, such as heparin, enoxaparin, or warfarin. Sotalol, atropine, and lidocaine are not appropriate for this complication.

DIF: Applying/Application REF: 682
KEY: Cardiac electrical conduction| medication
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse administers prescribed adenosine (Adenocard) to a client. Which response should the nurse assess for as the expected therapeutic response?
a. Decreased intraocular pressure
b. Increased heart rate
c. Short period of asystole
d. Hypertensive crisis

ANS: C
Clients usually respond to adenosine with a short period of asystole, bradycardia, hypotension, dyspnea, and chest pain. Adenosine has no conclusive impact on intraocular pressure.

DIF: Applying/Application REF: 677
KEY: Cardiac electrical conduction| medication
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. A telemetry nurse assesses a client with third-degree heart block who has wide QRS complexes and a heart rate of 35 beats/min on the cardiac monitor. Which assessment should the nurse complete next?
a. Pulmonary auscultation
b. Pulse strength and amplitude
c. Level of consciousness
d. Mobility and gait stability

ANS: C
A heart rate of 40 beats/min or less with widened QRS complexes could have hemodynamic consequences. The client is at risk for inadequate cerebral perfusion. The nurse should assess for level of consciousness, light-headedness, confusion, syncope, and seizure activity. Although the other assessments should be completed, the

clients level of consciousness is the priority.

DIF: Applying/Application REF: 685
KEY: Cardiac electrical conduction| vascular perfusion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse cares for a client with an intravenous temporary pacemaker for bradycardia. The nurse observes the presence of a pacing spike but no QRS complex on the clients electrocardiogram. Which action should the nurse take next?
a. Administer intravenous diltiazem (Cardizem).
b. Assess vital signs and level of consciousness.
c. Administer sublingual nitroglycerin.
d. Assess capillary refill and temperature.

ANS: B
In temporary pacing, the wires are threaded onto the epicardial surface of the heart and exit through the chest wall. The pacemaker spike should be followed immediately by a QRS complex. Pacing spikes seen without subsequent QRS complexes imply loss of capture. If there is no capture, then there is no ventricular depolarization and contraction. The nurse should assess for cardiac output via vital signs and level of consciousness. The other interventions would not determine if the client is tolerating the loss of capture.

DIF: Applying/Application REF: 679
KEY: Cardiac electrical conduction
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A nurse prepares to defibrillate a client who is in ventricular fibrillation. Which priority intervention should the nurse perform prior to defibrillating this client?
a. Make sure the defibrillator is set to the synchronous mode.
b. Administer 1 mg of intravenous epinephrine.
c. Test the equipment by delivering a smaller shock at 100 joules.
d. Ensure that everyone is clear of contact with the client and the bed.

ANS: D
To avoid injury, the rescuer commands that all personnel clear contact with the client or the bed and ensures their compliance before delivery of the shock. A precordial thump can be delivered when no defibrillator is available. Defibrillation is done in asynchronous mode. Equipment should not be tested before a client is defibrillated because this is an emergency procedure; equipment should be checked on a routine basis. Epinephrine should be administered after defibrillation.

DIF: Applying/Application REF: 683
KEY: Cardiac electrical conduction| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. After teaching a client who has an implantable cardioverter-defibrillator (ICD), a nurse assesses the clients understanding. Which statement by the client indicates a correct understanding of the teaching?
a. I should wear a snug-fitting shirt over the ICD.
b. I will avoid sources of strong electromagnetic fields.
c. I should participate in a strenuous exercise program.
d. Now I can discontinue my antidysrhythmic medication.

ANS: B
The client being discharged with an ICD is instructed to avoid strong sources of electromagnetic fields. Clients should avoid tight clothing, which could cause irritation over the ICD generator. The client should be encouraged to exercise but should not engage in strenuous activities that cause the heart rate to meet or exceed the ICD cutoff point because the ICD can discharge inappropriately. The client should continue all prescribed medications.

DIF: Applying/Application REF: 689
KEY: Cardiac electrical conduction MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

11. A nurse cares for a client with atrial fibrillation who reports fatigue when completing activities of daily living. What interventions should the nurse implement to address this clients concerns?
a. Administer oxygen therapy at 2 liters per nasal cannula.
b. Provide the client with a sleeping pill to stimulate rest.
c. Schedule periods of exercise and rest during the day.
d. Ask unlicensed assistive personnel to help bathe the client.

ANS: C
Clients who have atrial fibrillation are at risk for decreased cardiac output and fatigue when completing activities of daily living. The nurse should schedule periods of exercise and rest during the day to decrease fatigue. The other interventions will not assist the client with self-care activities.

DIF: Applying/Application REF: 673
KEY: Cardiac electrical conduction MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

12. A nurse assists with the cardioversion of a client experiencing acute atrial fibrillation. Which action should the nurse take prior to the initiation of cardioversion?
a. Administer intravenous adenosine.
b. Turn off oxygen therapy.
c. Ensure a tongue blade is available.
d. Position the client on the left side.

ANS: B
For safety during cardioversion, the nurse should turn off any oxygen therapy to prevent fire. The other interventions are not appropriate for a cardioversion. The client should be placed in a supine position.

DIF: Remembering/Knowledge REF: 683
KEY: Assessment/diagnostic examination| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A nurse prepares to discharge a client with cardiac dysrhythmia who is prescribed home health care services. Which priority information should be communicated to the home health nurse upon discharge?
a. Medication reconciliation
b. Immunization history
c. Religious beliefs
d. Nutrition preferences

ANS: A
The home health nurse needs to know current medications the client is taking to ensure assessment, evaluation, and further education related to these medications. The other information will not assist the nurse to develop a plan of care for the client.

DIF: Applying/Application REF: 688
KEY: Hand-off communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A nurse assesses a client with tachycardia. Which clinical manifestation requires immediate intervention by the nurse?
a. Mid-sternal chest pain
b. Increased urine output
c. Mild orthostatic hypotension
d. P wave touching the T wave

ANS: A
Chest pain, possibly angina, indicates that tachycardia may be increasing the clients myocardial workload and oxygen demand to such an extent that normal oxygen delivery cannot keep pace. This results in myocardial hypoxia and pain. Increased urinary output and mild orthostatic hypotension are not life-threatening conditions and therefore do not require immediate intervention. The P wave touching the T wave indicates significant tachycardia and should be assessed to determine the underlying rhythm and cause; this is an important assessment but is not as critical as chest pain, which indicates cardiac cell death.

DIF: Applying/Application REF: 678
KEY: Cardiac electrical conduction
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse teaches a client who experiences occasional premature atrial contractions (PACs) accompanied by palpitations that resolve spontaneously without treatment. Which statement should the nurse include in this clients teaching?
a. Minimize or abstain from caffeine.
b. Lie on your side until the attack subsides.
c. Use your oxygen when you experience PACs.
d. Take amiodarone (Cordarone) daily to prevent PACs.

ANS: A
PACs usually have no hemodynamic consequences. For a client experiencing infrequent PACs, the nurse should explore possible lifestyle causes, such as excessive caffeine intake and stress. Lying on the side will not prevent or resolve PACs. Oxygen is not necessary. Although medications may be needed to control symptomatic dysrhythmias, for infrequent PACs, the client first should try lifestyle changes to control them.

DIF: Applying/Application REF: 678
KEY: Patient education| cardiac electrical conduction
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

16. The nurse asks a client who has experienced ventricular dysrhythmias about substance abuse. The client asks, Why do you want to know if I use cocaine? How should the nurse respond?
a. Substance abuse puts clients at risk for many health issues.
b. The hospital requires that I ask you about cocaine use.
c. Clients who use cocaine are at risk for fatal dysrhythmias.
d. We can provide services for cessation of substance abuse.

ANS: C
Clients who use cocaine or illicit inhalants are particularly at risk for potentially fatal dysrhythmias. The other responses do not adequately address the clients question.

DIF: Remembering/Knowledge REF: 672
KEY: Cardiac electrical conduction| substance abuse
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

17. A nurse supervises an unlicensed assistive personnel (UAP) applying electrocardiographic monitoring. Which statement should the nurse provide to the UAP related to this procedure?
a. Clean the skin and clip hairs if needed.
b. Add gel to the electrodes prior to applying them.
c. Place the electrodes on the posterior chest.
d. Turn off oxygen prior to monitoring the client.

ANS: A
To ensure the best signal transmission, the skin should be clean and hairs clipped. Electrodes should be placed on the anterior chest, and no additional gel is needed. Oxygen has no impact on electrocardiographic

monitoring.

DIF: Remembering/Knowledge REF: 667
KEY: Assessment/diagnostic examination| interdisciplinary team| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A nurse assesses a clients electrocardiogram (ECG) and observes the reading shown below:

How should the nurse document this clients ECG strip?
a. Ventricular tachycardia
b. Ventricular fibrillation
c. Sinus rhythm with premature atrial contractions (PACs)
d. Sinus rhythm with premature ventricular contractions (PVCs)

ANS: D
Sinus rhythm with PVCs has an underlying regular sinus rhythm with ventricular depolarization that sometimes precede atrial depolarization. Ventricular tachycardia and ventricular fibrillation rhythms would not have sinus beats present. Premature atrial contractions are atrial contractions initiated from another region of the atria before the sinus node initiates atrial depolarization.

DIF: Applying/Application REF: 684
KEY: Cardiac electrical conduction| documentation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

19. A nurse cares for a client who is on a cardiac monitor. The monitor displayed the rhythm shown below:

Which action should the nurse take first?
a. Assess airway, breathing, and level of consciousness.
b. Administer an amiodarone bolus followed by a drip.
c. Cardiovert the client with a biphasic defibrillator.
d. Begin cardiopulmonary resuscitation (CPR).

ANS: A
Ventricular tachycardia occurs with repetitive firing of an irritable ventricular ectopic focus, usually at a rate of 140 to 180 beats/min or more. Ventricular tachycardia is a lethal dysrhythmia. The nurse should first assess if the client is alert and breathing. Then the nurse should call a Code Blue and begin CPR. If this client is pulseless, the treatment of choice is defibrillation. Amiodarone is the antidysrhythmic of choice, but it is not the first action.

DIF: Applying/Application REF: 685
KEY: Cardiac electrical conduction| medical emergency
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

20. A nurse performs an admission assessment on a 75-year-old client with multiple chronic diseases. The clients blood pressure is 135/75 mm Hg and oxygen saturation is 94% on 2 liters per nasal cannula. The nurse assesses the clients rhythm on the cardiac monitor and observes the reading shown below:

Which action should the nurse take first?
a. Begin external temporary pacing.
b. Assess peripheral pulse strength.
c. Ask the client what medications he or she takes.
d. Administer 1 mg of atropine.

ANS: C
This client is stable and therefore does not require any intervention except to determine the cause of the bradycardia. Bradycardia is often caused by medications. Clients who have multiple chronic diseases are often

on multiple medications that can interact with each other. The nurse should assess the clients current medications first.

DIF: Applying/Application REF: 673
KEY: Cardiac electrical conduction| medications| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

21. The nurse is caring for a client on the medical-surgical unit who suddenly becomes unresponsive and has no pulse. The cardiac monitor shows the rhythm below:

After calling for assistance and a defibrillator, which action should the nurse take next?
a. Perform a pericardial thump.
b. Initiate cardiopulmonary resuscitation (CPR).
c. Start an 18-gauge intravenous line.
d. Ask the clients family about code status.

ANS: B
The clients rhythm is ventricular fibrillation. This is a lethal rhythm that is best treated with immediate defibrillation. While the nurse is waiting for the defibrillator to arrive, the nurse should start CPR. A pericardial thump is not a treatment for ventricular fibrillation. If the client does not already have an IV, other members of the team can insert one after defibrillation. The clients code status should already be known by the nurse prior to this event.

DIF: Applying/Application REF: 686
KEY: Cardiac electrical conduction| medical emergency
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

22. After assessing a client who is receiving an amiodarone intravenous infusion for unstable ventricular tachycardia, the nurse documents the findings and compares these with the previous assessment findings:
Vital Signs Nursing Assessment
Time: 0800
Temperature: 98 F
Heart rate: 68 beats/min
Blood pressure: 135/60 mm Hg
Respiratory rate: 14 breaths/min
Oxygen saturation: 96%
Oxygen therapy: 2 L nasal cannula

Time: 1000
Temperature: 98.2 F
Heart rate: 50 beats/min
Blood pressure: 132/57 mm Hg
Respiratory rate: 16 breaths/min
Oxygen saturation: 95%
Oxygen therapy: 2 L nasal cannula Time: 0800
Client alert and oriented.
Cardiac rhythm: normal sinus rhythm.
Skin: warm, dry, and appropriate for race.
Respirations equal and unlabored.
Client denies shortness of breath and chest pain.

Time: 1000
Client alert and oriented.
Cardiac rhythm: sinus bradycardia.
Skin: warm, dry, and appropriate for race.
Respirations equal and unlabored.
Client denies shortness of breath and chest pain.

Client voids 420 mL of clear yellow urine.
Based on the assessments, which action should the nurse take?
a. Stop the infusion and flush the IV.
b. Slow the amiodarone infusion rate.
c. Administer IV normal saline.
d. Ask the client to cough and deep breathe.

ANS: B
IV administration of amiodarone may cause bradycardia and atrioventricular (AV) block. The correct action for the nurse to take at this time is to slow the infusion, because the client is asymptomatic and no evidence reveals AV block that might require pacing. Abruptly ceasing the medication could allow fatal dysrhythmias to occur. The administration of IV fluids and encouragement of coughing and deep breathing exercises are not indicated, and will not increase the clients heart rate.

DIF: Applying/Application REF: 675
KEY: Cardiac electrical conduction| medication
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A nurse cares for a client with congestive heart failure who has a regular cardiac rhythm of 128 beats/min. For which physiologic alterations should the nurse assess? (Select all that apply.)
a. Decrease in cardiac output
b. Increase in cardiac output
c. Decrease in blood pressure
d. Increase in blood pressure
e. Decrease in urine output
f. Increase in urine output

ANS: A, D, E
Elevated heart rates in a healthy client initially cause blood pressure and cardiac output to increase. However, in a client who has congestive heart failure or a client with long-term tachycardia, ventricular filling time, cardiac output, and blood pressure eventually decrease. As cardiac output and blood pressure decrease, urine output will fall.

DIF: Applying/Application REF: 672
KEY: Cardiac electrical conduction| heart failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse teaches a client with a new permanent pacemaker. Which instructions should the nurse include in this clients teaching? (Select all that apply.)
a. Until your incision is healed, do not submerge your pacemaker. Only take showers.
b. Report any pulse rates lower than your pacemaker settings.
c. If you feel weak, apply pressure over your generator.
d. Have your pacemaker turned off before having magnetic resonance imaging (MRI).
e. Do not lift your left arm above the level of your shoulder for 8 weeks.

ANS: A, B, E
The client should not submerge in water until the site has healed; after the incision is healed, the client may take showers or baths without concern for the pacemaker. The client should be instructed to report changes in heart rate or rhythm, such as rates lower than the pacemaker setting or greater than 100 beats/min. The client should be advised of restrictions on physical activity for 8 weeks to allow the pacemaker to settle in place. The client should never apply pressure over the generator and should avoid tight clothing. The client should never have MRI because, whether turned on or off, the pacemaker contains metal. The client should be advised to inform all health care providers that he or she has a pacemaker.

DIF: Applying/Application REF: 690

KEY: Cardiac electrical conduction| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A nurse is teaching a client with premature ectopic beats. Which education should the nurse include in this clients teaching? (Select all that apply.)
a. Smoking cessation
b. Stress reduction and management
c. Avoiding vagal stimulation
d. Adverse effects of medications
e. Foods high in potassium

ANS: A, B, D
A client who has premature beats or ectopic rhythms should be taught to stop smoking, manage stress, take medications as prescribed, and report adverse effects of medications. Clients with premature beats are not at risk for vasovagal attacks or potassium imbalances.

DIF: Remembering/Knowledge REF: 688
KEY: Patient education
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 35: Care of Patients with Cardiac Problems

MULTIPLE CHOICE

1. A nurse assesses clients on a cardiac unit. Which client should the nurse identify as being at greatest risk for the development of left-sided heart failure?
a. A 36-year-old woman with aortic stenosis
b. A 42-year-old man with pulmonary hypertension
c. A 59-year-old woman who smokes cigarettes daily
d. A 70-year-old man who had a cerebral vascular accident

ANS: A
Although most people with heart failure will have failure that progresses from left to right, it is possible to have left-sided failure alone for a short period. It is also possible to have heart failure that progresses from right to left. Causes of left ventricular failure include mitral or aortic valve disease, coronary artery disease, and hypertension. Pulmonary hypertension and chronic cigarette smoking are risk factors for right ventricular failure. A cerebral vascular accident does not increase the risk of heart failure.

DIF: Applying/Application REF: 692
KEY: Heart failure| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse assesses a client in an outpatient clinic. Which statement alerts the nurse to the possibility of left-sided heart failure?
a. I have been drinking more water than usual.
b. I am awakened by the need to urinate at night.
c. I must stop halfway up the stairs to catch my breath.
d. I have experienced blurred vision on several occasions.

ANS: C
Clients with left-sided heart failure report weakness or fatigue while performing normal activities of daily living, as well as difficulty breathing, or catching their breath. This occurs as fluid moves into the alveoli. Nocturia is often seen with right-sided heart failure. Thirst and blurred vision are not related to heart failure.

DIF: Understanding/Comprehension REF: 695
KEY: Heart failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

3. A nurse assesses a client admitted to the cardiac unit. Which statement by the client alerts the nurse to the possibility of right-sided heart failure?
a. I sleep with four pillows at night.
b. My shoes fit really tight lately.
c. I wake up coughing every night.
d. I have trouble catching my breath.

ANS: B
Signs of systemic congestion occur with right-sided heart failure. Fluid is retained, pressure builds in the venous system, and peripheral edema develops. Left-sided heart failure symptoms include respiratory symptoms. Orthopnea, coughing, and difficulty breathing all could be results of left-sided heart failure.

DIF: Understanding/Comprehension REF: 696
KEY: Heart failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

4. While assessing a client on a cardiac unit, a nurse identifies the presence of an S3 gallop. Which action should the nurse take next?

a. Assess for symptoms of left-sided heart failure.
b. Document this as a normal finding.
c. Call the health care provider immediately.
d. Transfer the client to the intensive care unit.

ANS: A
The presence of an S3 gallop is an early diastolic filling sound indicative of increasing left ventricular pressure and left ventricular failure. The other actions are not warranted.

DIF: Remembering/Knowledge REF: 696
KEY: Heart failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse cares for a client with right-sided heart failure. The client asks, Why do I need to weigh myself every day? How should the nurse respond?
a. Weight is the best indication that you are gaining or losing fluid.
b. Daily weights will help us make sure that youre eating properly.
c. The hospital requires that all inpatients be weighed daily.
d. You need to lose weight to decrease the incidence of heart failure.

ANS: A
Daily weights are needed to document fluid retention or fluid loss. One liter of fluid equals 2.2 pounds. The other responses do not address the importance of monitoring fluid retention or loss.

DIF: Remembering/Knowledge REF: 696
KEY: Heart failure| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse is teaching a client with heart failure who has been prescribed enalapril (Vasotec). Which statement should the nurse include in this clients teaching?
a. Avoid using salt substitutes.
b. Take your medication with food.
c. Avoid using aspirin-containing products.
d. Check your pulse daily.

ANS: A
Angiotensin-converting enzyme (ACE) inhibitors such as enalapril inhibit the excretion of potassium. Hyperkalemia can be a life-threatening side effect, and clients should be taught to limit potassium intake. Salt substitutes are composed of potassium chloride. ACE inhibitors do not need to be taken with food and have no impact on the clients pulse rate. Aspirin is often prescribed in conjunction with ACE inhibitors and is not contraindicated.

DIF: Applying/Application REF: 698
KEY: Heart failure| angiotensin-converting enzyme (ACE) inhibitor| medication| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. After administering newly prescribed captopril (Capoten) to a client with heart failure, the nurse implements interventions to decrease complications. Which priority intervention should the nurse implement for this client?
a. Provide food to decrease nausea and aid in absorption.
b. Instruct the client to ask for assistance when rising from bed.
c. Collaborate with unlicensed assistive personnel to bathe the client.
d. Monitor potassium levels and check for symptoms of hypokalemia.

ANS: B
Administration of the first dose of angiotensin-converting enzyme (ACE) inhibitors is often associated with hypotension, usually termed first-dose effect. The nurse should instruct the client to seek assistance before

arising from bed to prevent injury from postural hypotension. ACE inhibitors do not need to be taken with food. Collaboration with unlicensed assistive personnel to provide hygiene is not a priority. The client should be encouraged to complete activities of daily living as independently as possible. The nurse should monitor for hyperkalemia, not hypokalemia, especially if the client has renal insufficiency secondary to heart failure.

DIF: Applying/Application REF: 698
KEY: Heart failure| angiotensin-converting enzyme (ACE) inhibitor| medication| patient education MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A nurse assesses a client after administering isosorbide mononitrate (Imdur). The client reports a headache. Which action should the nurse take?
a. Initiate oxygen therapy.
b. Hold the next dose of Imdur.
c. Instruct the client to drink water.
d. Administer PRN acetaminophen.

ANS: D
The vasodilating effects of isosorbide mononitrate frequently cause clients to have headaches during the initial period of therapy. Clients should be told about this side effect and encouraged to take the medication with food. Some clients obtain relief with mild analgesics, such as acetaminophen. The clients headache is not related to hypoxia or dehydration; therefore, these interventions would not help. The client needs to take the medication as prescribed to prevent angina; the medication should not be held.

DIF: Applying/Application REF: 699
KEY: Heart failure| nitroglycerin/nitrates| medication| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A nurse teaches a client who is prescribed digoxin (Lanoxin) therapy. Which statement should the nurse include in this clients teaching?
a. Avoid taking aspirin or aspirin-containing products.
b. Increase your intake of foods that are high in potassium.
c. Hold this medication if your pulse rate is below 80 beats/min.
d. Do not take this medication within 1 hour of taking an antacid.

ANS: D
Gastrointestinal absorption of digoxin is erratic. Many medications, especially antacids, interfere with its absorption. Clients are taught to hold their digoxin for bradycardia; a heart rate of 80 beats/min is too high for this cutoff. Potassium and aspirin have no impact on digoxin absorption, nor do these statements decrease complications of digoxin therapy.

DIF: Applying/Application REF: 699
KEY: Heart failure| digoxin| medication| patient education
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A nurse teaches a client who has a history of heart failure. Which statement should the nurse include in this clients discharge teaching?
a. Avoid drinking more than 3 quarts of liquids each day.
b. Eat six small meals daily instead of three larger meals.
c. When you feel short of breath, take an additional diuretic.
d. Weigh yourself daily while wearing the same amount of clothing.

ANS: D
Clients with heart failure are instructed to weigh themselves daily to detect worsening heart failure early, and thus avoid complications. Other signs of worsening heart failure include increasing dyspnea, exercise intolerance, cold symptoms, and nocturia. Fluid overload increases symptoms of heart failure. The client should be taught to eat a heart-healthy diet, balance intake and output to prevent dehydration and overload, and

take medications as prescribed. The most important discharge teaching is daily weights as this provides the best data related to fluid retention.

DIF: Applying/Application REF: 700
KEY: Heart failure| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

11. A nurse admits a client who is experiencing an exacerbation of heart failure. Which action should the nurse take first?
a. Assess the clients respiratory status.
b. Draw blood to assess the clients serum electrolytes.
c. Administer intravenous furosemide (Lasix).
d. Ask the client about current medications.

ANS: A
Assessment of respiratory and oxygenation status is the priority nursing intervention for the prevention of complications. Monitoring electrolytes, administering diuretics, and asking about current medications are important but do not take priority over assessing respiratory status.

DIF: Applying/Application REF: 700
KEY: Heart failure| respiratory distress/failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12. A nurse assesses a client with mitral valve stenosis. What clinical manifestation should alert the nurse to the possibility that the clients stenosis has progressed?
a. Oxygen saturation of 92%
b. Dyspnea on exertion
c. Muted systolic murmur
d. Upper extremity weakness

ANS: B
Dyspnea on exertion develops as the mitral valvular orifice narrows and pressure in the lungs increases. The other manifestations do not relate to the progression of mitral valve stenosis.

DIF: Applying/Application REF: 701
KEY: Valve disorder| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A nurse cares for a client recovering from prosthetic valve replacement surgery. The client asks, Why will I need to take anticoagulants for the rest of my life? How should the nurse respond?
a. The prosthetic valve places you at greater risk for a heart attack.
b. Blood clots form more easily in artificial replacement valves.
c. The vein taken from your leg reduces circulation in the leg.
d. The surgery left a lot of small clots in your heart and lungs.

ANS: B
Synthetic valve prostheses and scar tissue provide surfaces on which platelets can aggregate easily and initiate the formation of blood clots. The other responses are inaccurate.

DIF: Applying/Application REF: 709
KEY: Valve disorder| patient education| anticoagulants
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. After teaching a client who is being discharged home after mitral valve replacement surgery, the nurse assesses the clients understanding. Which client statement indicates a need for additional teaching?
a. Ill be able to carry heavy loads after 6 months of rest.

b. I will have my teeth cleaned by my dentist in 2 weeks.
c. I must avoid eating foods high in vitamin K, like spinach.
d. I must use an electric razor instead of a straight razor to shave.

ANS: B
Clients who have defective or repaired valves are at high risk for endocarditis. The client who has had valve surgery should avoid dental procedures for 6 months because of the risk for endocarditis. When undergoing a mitral valve replacement surgery, the client needs to be placed on anticoagulant therapy to prevent vegetation forming on the new valve. Clients on anticoagulant therapy should be instructed on bleeding precautions, including using an electric razor. If the client is prescribed warfarin, the client should avoid foods high in vitamin K. Clients recovering from open heart valve replacements should not carry anything heavy for 6 months while the chest incision and muscle heal.

DIF: Applying/Application REF: 707
KEY: Valve disorder| patient education| hygiene
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A nurse cares for a client with infective endocarditis. Which infection control precautions should the nurse use?
a. Standard Precautions
b. Bleeding precautions
c. Reverse isolation
d. Contact isolation

ANS: A
The client with infective endocarditis does not pose any specific threat of transmitting the causative organism. Standard Precautions should be used. Bleeding precautions or reverse or contact isolation is not necessary.

DIF: Applying/Application REF: 710
KEY: Infection| Standard Precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

16. A nurse assesses a client with pericarditis. Which assessment finding should the nurse expect to find?
a. Heart rate that speeds up and slows down
b. Friction rub at the left lower sternal border
c. Presence of a regular gallop rhythm
d. Coarse crackles in bilateral lung bases

ANS: B
The client with pericarditis may present with a pericardial friction rub at the left lower sternal border. This sound is the result of friction from inflamed pericardial layers when they rub together. The other assessments are not related.

DIF: Remembering/Knowledge REF: 712
KEY: Inflammatory response| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

17. After teaching a client who is recovering from a heart transplant to change positions slowly, the client asks, Why is this important? How should the nurse respond?
a. Rapid position changes can create shear and friction forces, which can tear out your internal vascular sutures.
b. Your new vascular connections are more sensitive to position changes, leading to increased intravascular pressure and dizziness.
c. Your new heart is not connected to the nervous system and is unable to respond to decreases in blood pressure caused by position changes.
d. While your heart is recovering, blood flow is diverted away from the brain, increasing the risk for stroke

when you stand up.

ANS: C
Because the new heart is denervated, the baroreceptor and other mechanisms that compensate for blood pressure drops caused by position changes do not function. This allows orthostatic hypotension to persist in the postoperative period. The other options are false statements and do not correctly address the clients question.

DIF: Understanding/Comprehension REF: 716
KEY: Transplant| patient education
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

18. A nurse teaches a client recovering from a heart transplant who is prescribed cyclosporine (Sandimmune). Which statement should the nurse include in this clients discharge teaching?
a. Use a soft-bristled toothbrush and avoid flossing.
b. Avoid large crowds and people who are sick.
c. Change positions slowly to avoid hypotension.
d. Check your heart rate before taking the medication.

ANS: B
These agents cause immune suppression, leaving the client more vulnerable to infection. The medication does not place the client at risk for bleeding, orthostatic hypotension, or a change in heart rate.

DIF: Applying/Application REF: 716
KEY: Transplant| immune suppressant
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

19. A nurse cares for a client with end-stage heart failure who is awaiting a transplant. The client appears depressed and states, I know a transplant is my last chance, but I dont want to become a vegetable. How should the nurse respond?
a. Would you like to speak with a priest or chaplain?
b. I will arrange for a psychiatrist to speak with you.
c. Do you want to come off the transplant list?
d. Would you like information about advance directives?

ANS: D
The client is verbalizing a real concern or fear about negative outcomes of the surgery. This anxiety itself can have a negative effect on the outcome of the surgery because of sympathetic stimulation. The best action is to allow the client to verbalize the concern and work toward a positive outcome without making the client feel as though he or she is crazy. The client needs to feel that he or she has some control over the future. The nurse personally provides care to address the clients concerns instead of pushing the clients issues off on a chaplain or psychiatrist. The nurse should not jump to conclusions and suggest taking the client off the transplant list, which is the best treatment option.

DIF: Applying/Application REF: 704
KEY: Transplant| psychosocial response| anxiety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Psychosocial Integrity

20. A nurse assesses a client who has a history of heart failure. Which question should the nurse ask to assess the extent of the clients heart failure?
a. Do you have trouble breathing or chest pain?
b. Are you able to walk upstairs without fatigue?
c. Do you awake with breathlessness during the night?
d. Do you have new-onset heaviness in your legs?

ANS: B
Clients with a history of heart failure generally have negative findings, such as shortness of breath. The nurse

needs to determine whether the clients activity is the same or worse, or whether the client identifies a decrease in activity level. Trouble breathing, chest pain, breathlessness at night, and peripheral edema are symptoms of heart failure, but do not provide data that can determine the extent of the clients heart failure.

DIF: Applying/Application REF: 695
KEY: Heart failure| functional ability| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

21. A nurse cares for an older adult client with heart failure. The client states, I dont know what to do. I dont want to be a burden to my daughter, but I cant do it alone. Maybe I should die. How should the nurse respond?
a. Would you like to talk more about this?
b. You are lucky to have such a devoted daughter.
c. It is normal to feel as though you are a burden.
d. Would you like to meet with the chaplain?

ANS: A
Depression can occur in clients with heart failure, especially older adults. Having the client talk about his or her feelings will help the nurse focus on the actual problem. Open-ended statements allow the client to respond safely and honestly. The other options minimize the clients concerns and do not allow the nurse to obtain more information to provide client-centered care.

DIF: Applying/Application REF: 696
KEY: Heart failure| support| psychosocial response
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

22. A nurse teaches a client with heart failure about energy conservation. Which statement should the nurse include in this clients teaching?
a. Walk until you become short of breath, and then walk back home.
b. Gather everything you need for a chore before you begin.
c. Pull rather than push or carry items heavier than 5 pounds.
d. Take a walk after dinner every day to build up your strength.

ANS: B
A client who has heart failure should be taught to conserve energy. Gathering all supplies needed for a chore at one time decreases the amount of energy needed. The client should not walk until becoming short of breath because he or she may not make it back home. Pushing a cart takes less energy than pulling or lifting. Although walking after dinner may help the client, the nurse should teach the client to complete activities when he or she has the most energy. This is usually in the morning.

DIF: Applying/Application REF: 709
KEY: Heart failure| functional ability| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

23. A nurse is caring for a client with acute pericarditis who reports substernal precordial pain that radiates to the left side of the neck. Which nonpharmacologic comfort measure should the nurse implement?
a. Apply an ice pack to the clients chest.
b. Provide a neck rub, especially on the left side.
c. Allow the client to lie in bed with the lights down.
d. Sit the client up with a pillow to lean forward on.

ANS: D
Pain from acute pericarditis may worsen when the client lays supine. The nurse should position the client in a comfortable position, which usually is upright and leaning slightly forward. Pain is decreased by using gravity to take pressure off the heart muscle. An ice pack and neck rub will not relieve this pain.

DIF: Applying/Application REF: 712

KEY: Nonpharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

24. A nurse assesses a client who has mitral valve regurgitation. For which cardiac dysrhythmia should the nurse assess?
a. Preventricular contractions
b. Atrial fibrillation
c. Symptomatic bradycardia
d. Sinus tachycardia

ANS: B
Atrial fibrillation is a clinical manifestation of mitral valve regurgitation and stenosis. Preventricular contractions and bradycardia are not associated with valvular problems. These are usually identified in clients with electrolyte imbalances, myocardial infarction, and sinus node problems. Sinus tachycardia is a manifestation of aortic regurgitation due to a decrease in cardiac output.

DIF: Understanding/Comprehension REF: 705
KEY: Valve disorder| cardiac dysrhythmia
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse is assessing a client with left-sided heart failure. For which clinical manifestations should the nurse assess? (Select all that apply.)
a. Pulmonary crackles
b. Confusion, restlessness
c. Pulmonary hypertension
d. Dependent edema
e. Cough that worsens at night

ANS: A, B, E
Left-sided heart failure occurs with a decrease in contractility of the heart or an increase in afterload. Most of the signs will be noted in the respiratory system. Right-sided heart failure occurs with problems from the pulmonary vasculature onward including pulmonary hypertension. Signs will be noted before the right atrium or ventricle including dependent edema.

DIF: Remembering/Knowledge REF: 695
KEY: Heart failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse evaluates laboratory results for a client with heart failure. Which results should the nurse expect? (Select all that apply.)
a. Hematocrit: 32.8%
b. Serum sodium: 130 mEq/L
c. Serum potassium: 4.0 mEq/L
d. Serum creatinine: 1.0 mg/dL
e. Proteinuria
f. Microalbuminuria

ANS: A, B, E, F
A hematocrit of 32.8% is low (should be 42.6%), indicating a dilutional ratio of red blood cells to fluid. A serum sodium of 130 mEq/L is low because of hemodilution. Microalbuminuria and proteinuria are present, indicating a decrease in renal filtration. These are early warning signs of decreased compliance of the heart. The potassium level is on the high side of normal and the serum creatinine level is normal.

DIF: Applying/Application REF: 696

KEY: Heart failure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse assesses clients on a cardiac unit. Which clients should the nurse identify as at greatest risk for the development of acute pericarditis? (Select all that apply.)
a. A 36-year-old woman with systemic lupus erythematosus (SLE)
b. A 42-year-old man recovering from coronary artery bypass graft surgery
c. A 59-year-old woman recovering from a hysterectomy
d. An 80-year-old man with a bacterial infection of the respiratory tract
e. An 88-year-old woman with a stage III sacral ulcer

ANS: A, B, D
Acute pericarditis is most commonly associated acute exacerbations of systemic connective tissue disease, including SLE; with Dresslers syndrome, or inflammation of the cardiac sac after cardiac surgery or a myocardial infarction; and with infective organisms, including bacterial, viral, and fungal infections. Abdominal and reproductive surgeries and pressure ulcers do not increase clients risk for acute pericarditis.

DIF: Applying/Application REF: 712
KEY: Inflammatory response| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. After teaching a client with congestive heart failure (CHF), the nurse assesses the clients understanding. Which client statements indicate a correct understanding of the teaching related to nutritional intake? (Select all that apply.)
a. Ill read the nutritional labels on food items for salt content.
b. I will drink at least 3 liters of water each day.
c. Using salt in moderation will reduce the workload of my heart.
d. I will eat oatmeal for breakfast instead of ham and eggs.
e. Substituting fresh vegetables for canned ones will lower my salt intake.

ANS: A, D, E
Nutritional therapy for a client with CHF is focused on decreasing sodium and water retention to decrease the workload of the heart. The client should be taught to read nutritional labels on all food items, omit table salt and foods high in sodium (e.g., ham and canned foods), and limit water intake to a normal 2 L/day.

DIF: Applying/Application REF: 695
KEY: Heart failure| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A nurse collaborates with an unlicensed assistive personnel (UAP) to provide care for a client with congestive heart failure. Which instructions should the nurse provide to the UAP when delegating care for this client? (Select all that apply.)
a. Reposition the client every 2 hours.
b. Teach the client to perform deep-breathing exercises.
c. Accurately record intake and output.
d. Use the same scale to weigh the client each morning.
e. Place the client on oxygen if the client becomes short of breath.

ANS: A, C, D
The UAP should reposition the client every 2 hours to improve oxygenation and prevent atelectasis. The UAP can also accurately record intake and output, and use the same scale to weigh the client each morning before breakfast. UAPs are not qualified to teach clients or assess the need for and provide oxygen therapy.

DIF: Applying/Application REF: 697
KEY: Heart failure| delegation| interdisciplinary team| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse prepares to discharge a client who has heart failure. Based on the Heart Failure Core Measure Set, which actions should the nurse complete prior to discharging this client? (Select all that apply.)
a. Teach the client about dietary restrictions.
b. Ensure the client is prescribed an angiotensin-converting enzyme (ACE) inhibitor.
c. Encourage the client to take a baby aspirin each day.
d. Confirm that an echocardiogram has been completed.
e. Consult a social worker for additional resources.

ANS: A, B, D
The Heart Failure Core Measure Set includes discharge instructions on diet, activity, medications, weight monitoring and plan for worsening symptoms, evaluation of left ventricular systolic function (usually with an echocardiogram), and prescribing an ACE inhibitor or angiotensin receptor blocker. Aspirin is not part of the Heart Failure Core Measure Set and is usually prescribed for clients who experience a myocardial infarction. Although the nurse may consult the social worker or case manager for additional resources, this is not part of the Core Measures.

DIF: Understanding/Comprehension REF: 702
KEY: Heart failure| discharge| Core Measures| The Joint Commission
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse prepares to discharge a client who has heart failure. Which questions should the nurse ask to ensure this clients safety prior to discharging home? (Select all that apply.)
a. Are your bedroom and bathroom on the first floor?
b. What social support do you have at home?
c. Will you be able to afford your oxygen therapy?
d. What spiritual beliefs may impact your recovery?
e. Are you able to accurately weigh yourself at home?

ANS: A, B, D
To ensure safety upon discharge, the nurse should assess for structural barriers to functional ability, such as stairs. The nurse should also assess the clients available social support, which may include family, friends, and home health services. The clients ability to adhere to medication and treatments, including daily weights, should also be reviewed. The other questions do not address the clients safety upon discharge.

DIF: Applying/Application REF: 702
KEY: Heart failure| discharge| safety
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. A nurse assesses a client who is recovering from a heart transplant. Which assessment findings should alert the nurse to the possibility of heart transplant rejection? (Select all that apply.)
a. Shortness of breath
b. Abdominal bloating
c. New-onset bradycardia
d. Increased ejection fraction
e. Hypertension

ANS: A, B, C
Clinical manifestations of heart transplant rejection include shortness of breath, fatigue, fluid gain, abdominal bloating, new-onset bradycardia, hypotension, atrial fibrillation or flutter, decreased activity tolerance, and decreased ejection fraction.

DIF: Remembering/Knowledge REF: 716
KEY: Transplant| heart failure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A nurse assesses a client who is diagnosed with infective endocarditis. Which assessment findings should

the nurse expect? (Select all that apply.)
a. Weight gain
b. Night sweats
c. Cardiac murmur
d. Abdominal bloating
e. Oslers nodes

ANS: B, C, E
Clinical manifestations of infective endocarditis include fever with chills, night sweats, malaise and fatigue, anorexia and weight loss, cardiac murmur, and Oslers nodes on palms of the hands and soles of the feet. Abdominal bloating is a manifestation of heart transplantation rejection.

DIF: Remembering/Knowledge REF: 710
KEY: Endocarditis
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 36: Care of Patients with Vascular Problems

MULTIPLE CHOICE

1. A student nurse is assessing the peripheral vascular system of an older adult. What action by the student would cause the faculty member to intervene?
a. Assessing blood pressure in both upper extremities
b. Auscultating the carotid arteries for any bruits
c. Classifying capillary refill of 4 seconds as normal
d. Palpating both carotid arteries at the same time

ANS: D
The student should not compress both carotid arteries at the same time to avoid brain ischemia. Blood pressure should be taken and compared in both arms. Prolonged capillary refill is considered to be greater than 5 seconds in an older adult, so classifying refill of 4 seconds as normal would not require intervention. Bruits should be auscultated.

DIF: Remembering/Knowledge REF: 721
KEY: Nursing assessment| neurologic system| neurologic assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. The nurse is reviewing the lipid panel of a male client who has atherosclerosis. Which finding is most concerning?
a. Cholesterol: 126 mg/dL
b. High-density lipoprotein cholesterol (HDL-C): 48 mg/dL
c. Low-density lipoprotein cholesterol (LDL-C): 122 mg/dL
d. Triglycerides: 198 mg/dL

ANS: D
Triglycerides in men should be below 160 mg/dL. The other values are appropriate for adult males.

DIF: Remembering/Knowledge REF: 722
KEY: Laboratory values| lipid alterations
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. The nurse is evaluating a 3-day diet history with a client who has an elevated lipid panel. What meal selection indicates the client is managing this condition well with diet?
a. A 4-ounce steak, French fries, iceberg lettuce
b. Baked chicken breast, broccoli, tomatoes
c. Fried catfish, cornbread, peas
d. Spaghetti with meat sauce, garlic bread

ANS: B
The diet recommended for this client would be low in saturated fats and red meat, high in vegetables and whole grains (fiber), low in salt, and low in trans fat. The best choice is the chicken with broccoli and tomatoes. The French fries have too much fat and the iceberg lettuce has little fiber. The catfish is fried. The spaghetti dinner has too much red meat and no vegetables.

DIF: Evaluating/Synthesis REF: 722
KEY: Nutrition| fiber| self-care
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse is working with a client who takes atorvastatin (Lipitor). The clients recent laboratory results include a blood urea nitrogen (BUN) of 33 mg/dL and creatinine of 2.8 mg/dL. What action by the nurse is best?
a. Ask if the client eats grapefruit.

b. Assess the client for dehydration.
c. Facilitate admission to the hospital.
d. Obtain a random urinalysis.

ANS: A
There is a drug-food interaction between statins and grapefruit that can lead to acute kidney failure. This client has elevated renal laboratory results, indicating some degree of kidney involvement. The nurse should assess if the client eats grapefruit or drinks grapefruit juice. Dehydration can cause the BUN to be elevated, but the elevation in creatinine is more specific for a kidney injury. The client does not necessarily need to be admitted. A urinalysis may or may not be ordered.

DIF: Applying/Application REF: 723
KEY: Laboratory values| statins| nursing assessment| medication-food interaction
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A client has been diagnosed with hypertension but does not take the antihypertensive medications because of a lack of symptoms. What response by the nurse is best?
a. Do you have trouble affording your medications?
b. Most people with hypertension do not have symptoms.
c. You are lucky; most people get severe morning headaches.
d. You need to take your medicine or you will get kidney failure.

ANS: B
Most people with hypertension are asymptomatic, although a small percentage do have symptoms such as headache. The nurse should explain this to the client. Asking about paying for medications is not related because the client has already admitted nonadherence. Threatening the client with possible complications will not increase compliance.

DIF: Understanding/Comprehension REF: 725
KEY: Hypertension| antihypertensive medications| medication adherence
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A student nurse asks what essential hypertension is. What response by the registered nurse is best?
a. It means it is caused by another disease.
b. It means it is essential that it be treated.
c. It is hypertension with no specific cause.
d. It refers to severe and life-threatening hypertension.

ANS: C
Essential hypertension is the most common type of hypertension and has no specific cause such as an underlying disease process. Hypertension that is due to another disease process is called secondary hypertension. A severe, life-threatening form of hypertension is malignant hypertension.

DIF: Understanding/Comprehension REF: 724
KEY: Hypertension| pathophysiology| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse is interested in providing community education and screening on hypertension. In order to reach a priority population, to what target audience should the nurse provide this service?
a. African-American churches
b. Asian-American groceries
c. High school sports camps
d. Womens health clinics

ANS: A
African Americans in the United States have one of the highest rates of hypertension in the world. The nurse

has the potential to reach this priority population by providing services at African-American churches. Although hypertension education and screening are important for all groups, African Americans are the priority population for this intervention.

DIF: Remembering/Knowledge REF: 725
KEY: Hypertension| primary prevention| secondary prevention| cultural awareness
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Health Promotion and Maintenance

8. A client has hypertension and high risk factors for cardiovascular disease. The client is overwhelmed with the recommended lifestyle changes. What action by the nurse is best?
a. Assess the clients support system.
b. Assist in finding one change the client can control.
c. Determine what stressors the client faces in daily life.
d. Inquire about delegating some of the clients obligations.

ANS: B
All options are appropriate when assessing stress and responses to stress. However, this client feels overwhelmed by the suggested lifestyle changes. Instead of looking at all the needed changes, the nurse should assist the client in choosing one the client feels optimistic about controlling. Once the client has mastered that change, he or she can move forward with another change. Determining support systems, daily stressors, and delegation opportunities does not directly impact the clients feelings of control.

DIF: Applying/Application REF: 726
KEY: Hypertension| patient education| coping| psychosocial response
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

9. The nurse is caring for four hypertensive clients. Which druglaboratory value combination should the nurse report immediately to the health care provider?
a. Furosemide (Lasix)/potassium: 2.1 mEq/L
b. Hydrochlorothiazide (Hydrodiuril)/potassium: 4.2 mEq/L
c. Spironolactone (Aldactone)/potassium: 5.1 mEq/L
d. Torsemide (Demadex)/sodium: 142 mEq/L

ANS: A
Lasix is a loop diuretic and can cause hypokalemia. A potassium level of 2.1 mEq/L is quite low and should be reported immediately. Spironolactone is a potassium-sparing diuretic that can cause hyperkalemia. A potassium level of 5.1 mEq/L is on the high side, but it is not as critical as the low potassium with furosemide. The other two laboratory values are normal.

DIF: Applying/Application REF: 728
KEY: Hypertension| antihypertensive medications| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A nurse is assessing a client with peripheral artery disease (PAD). The client states walking five blocks is possible without pain. What question asked next by the nurse will give the best information?
a. Could you walk further than that a few months ago?
b. Do you walk mostly uphill, downhill, or on flat surfaces?
c. Have you ever considered swimming instead of walking?
d. How much pain medication do you take each day?

ANS: A
As PAD progresses, it takes less oxygen demand to cause pain. Needing to cut down on activity to be pain free indicates the clients disease is worsening. The other questions are useful, but not as important.

DIF: Applying/Application REF: 733
KEY: Pain| exercise| activity| peripheral vascular disease| pain assessment

MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. An older client with peripheral vascular disease (PVD) is explaining the daily foot care regimen to the family practice clinic nurse. What statement by the client may indicate a barrier to proper foot care?
a. I nearly always wear comfy sweatpants and house shoes.
b. Im glad I get energy assistance so my house isnt so cold.
c. My daughter makes sure I have plenty of lotion for my feet.
d. My hands shake when I try to do things requiring coordination.

ANS: D
Clients with PVD need to pay special attention to their feet. Toenails need to be kept short and cut straight across. The client whose hands shake may cause injury when trimming toenails. The nurse should refer this client to a podiatrist. Comfy sweatpants and house shoes are generally loose and not restrictive, which is important for clients with PVD. Keeping the house at a comfortable temperature makes it less likely the client will use alternative heat sources, such as heating pads, to stay warm. The client should keep the feet moist and soft with lotion.

DIF: Analyzing/Analysis REF: 739
KEY: Peripheral vascular disease| self-care| home safety
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Health Promotion and Maintenance

12. A client is taking warfarin (Coumadin) and asks the nurse if taking St. Johns wort is acceptable. What response by the nurse is best?
a. No, it may interfere with the warfarin.
b. There isnt any information about that.
c. Why would you want to take that?
d. Yes, it is a good supplement for you.

ANS: A
Many foods and drugs interfere with warfarin, St. Johns wort being one of them. The nurse should advise the client against taking it. The other answers are not accurate.

DIF: Understanding/Comprehension REF: 747
KEY: Anticoagulants| herbs and supplements| medication-food interactions| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse is teaching a larger female client about alcohol intake and how it affects hypertension. The client asks if drinking two beers a night is an acceptable intake. What answer by the nurse is best?
a. No, women should only have one beer a day as a general rule.
b. No, you should not drink any alcohol with hypertension.
c. Yes, since you are larger, you can have more alcohol.
d. Yes, two beers per day is an acceptable amount of alcohol.

ANS: A
Alcohol intake should be limited to two drinks a day for men and one drink a day for women. A drink is classified as one beer, 1.5 ounces of hard liquor, or 5 ounces of wine. Limited alcohol intake is acceptable with hypertension. The womans size does not matter.

DIF: Understanding/Comprehension REF: 726
KEY: Hypertension| lifestyle choices| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

14. A nurse is caring for four clients. Which one should the nurse see first?
a. Client who needs a beta blocker, and has a blood pressure of 92/58 mm Hg
b. Client who had a first dose of captopril (Capoten) and needs to use the bathroom

c. Hypertensive client with a blood pressure of 188/92 mm Hg
d. Client who needs pain medication prior to a dressing change of a surgical wound

ANS: B
Angiotensin-converting enzyme inhibitors such as captopril can cause hypotension, especially after the first dose. The nurse should see this client first to prevent falling if the client decides to get up without assistance. The two blood pressure readings are abnormal but not critical. The nurse should check on the client with higher blood pressure next to assess for problems related to the reading. The nurse can administer the beta blocker as standards state to hold it if the systolic blood pressure is below 90 mm Hg. The client who needs pain medication prior to the dressing change is not a priority over client safety and assisting the other client to the bathroom.

DIF: Analyzing/Analysis REF: 730
KEY: Hypertension| angiotensin-converting enzyme (ACE) inhibitors| antihypertensive medications| patient safety
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A client had a percutaneous transluminal coronary angioplasty for peripheral arterial disease. What assessment finding by the nurse indicates a priority outcome for this client has been met?
a. Pain rated as 2/10 after medication
b. Distal pulse on affected extremity 2+/4+
c. Remains on bedrest as directed
d. Verbalizes understanding of procedure

ANS: B
Assessing circulation distal to the puncture site is a critical nursing action. A pulse of 2+/4+ indicates good perfusion. Pain control, remaining on bedrest as directed after the procedure, and understanding are all important, but do not take priority over perfusion.

DIF: Evaluating/Synthesis REF: 736
KEY: Peripheral vascular disease| perfusion| nursing assessment
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

16. A client is 4 hours postoperative after a femoropopliteal bypass. The client reports throbbing leg pain on the affected side, rated as 7/10. What action by the nurse takes priority?
a. Administer pain medication as ordered.
b. Assess distal pulses and skin color.
c. Document the findings in the clients chart.
d. Notify the surgeon immediately.

ANS: B
Once perfusion has been restored or improved to an extremity, clients can often feel a throbbing pain due to the increased blood flow. However, it is important to differentiate this pain from ischemia. The nurse should assess for other signs of perfusion, such as distal pulses and skin color/temperature. Administering pain medication is done once the nurse determines the clients perfusion status is normal. Documentation needs to be thorough. Notifying the surgeon is not necessary.

DIF: Applying/Application REF: 738
KEY: Peripheral vascular disease| pain assessment| nursing process assessment| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17. A client had a femoropopliteal bypass graft with a synthetic graft. What action by the nurse is most important to prevent wound infection?
a. Appropriate hand hygiene before giving care
b. Assessing the clients temperature every 4 hours
c. Clean technique when changing dressings

d. Monitoring the clients daily white blood cell count

ANS: A
Hand hygiene is the best way to prevent infections in hospitalized clients. Dressing changes should be done with sterile technique. Assessing vital signs and white blood cell count will not prevent infection.

DIF: Applying/Application REF: 738
KEY: Infection control| hand hygiene| wound infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

18. A client is receiving an infusion of alteplase (Activase) for an intra-arterial clot. The client begins to mumble and is disoriented. What action by the nurse takes priority?
a. Assess the clients neurologic status.
b. Notify the Rapid Response Team.
c. Prepare to administer vitamin K.
d. Turn down the infusion rate.

ANS: B
Clients on fibrinolytic therapy are at high risk of bleeding. The sudden onset of neurologic signs may indicate the client is having a hemorrhagic stroke. The nurse does need to complete a thorough neurological examination, but should first call the Rapid Response Team based on the clients manifestations. The nurse notifies the Rapid Response Team first. Vitamin K is not the antidote for this drug. Turning down the infusion rate will not be helpful if the client is still receiving any of the drug.

DIF: Applying/Application REF: 740
KEY: Critical rescue| Rapid Response Team| medical emergencies| fibrinolytic agents
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nursing student is caring for a client with an abdominal aneurysm. What action by the student requires the registered nurse to intervene?
a. Assesses the client for back pain
b. Auscultates over abdominal bruit
c. Measures the abdominal girth
d. Palpates the abdomen in four quadrants

ANS: D
Abdominal aneurysms should never be palpated as this increases the risk of rupture. The registered nurse should intervene when the student attempts to do this. The other actions are appropriate.

DIF: Applying/Application REF: 740
KEY: Aneurysms| nursing process assessment| supervision| abdominal assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

20. A nurse is caring for a client with a deep vein thrombosis (DVT). What nursing assessment indicates a priority outcome has been met?
a. Ambulates with assistance
b. Oxygen saturation of 98%
c. Pain of 2/10 after medication
d. Verbalizing risk factors

ANS: B
A critical complication of DVT is pulmonary embolism. A normal oxygen saturation indicates that this has not occurred. The other assessments are also positive, but not the priority.

DIF: Analyzing/Analysis REF: 743
KEY: Pulmonary embolism| deep vein thrombosis| respiratory assessment| thromboembolic event MSC:

Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

21. A client has a deep vein thrombosis (DVT). What comfort measure does the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Ambulate the client.
b. Apply a warm moist pack.
c. Massage the clients leg.
d. Provide an ice pack.

ANS: B
Warm moist packs will help with the pain of a DVT. Ambulation is not a comfort measure. Massaging the clients legs is contraindicated to prevent complications such as pulmonary embolism. Ice packs are not recommended for DVT.

DIF: Understanding/Comprehension REF: 745
KEY: Thromboembolic event| deep vein thrombosis| comfort measures| nonpharmacologic comfort interventions| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

22. A nurse is assessing an obese client in the clinic for follow-up after an episode of deep vein thrombosis. The client has lost 20 pounds since the last visit. What action by the nurse is best?
a. Ask if the weight loss was intended.
b. Encourage a high-protein, high-fiber diet.
c. Measure for new compression stockings.
d. Review a 3-day food recall diary.

ANS: C
Compression stockings must fit correctly in order to work. After losing a significant amount of weight, the client should be re-measured and new stockings ordered if needed. The other options are appropriate, but not the most important.

DIF: Applying/Application REF: 745
KEY: Thromboembolic event| deep vein thrombosis| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

23. A nurse wants to provide community service that helps meet the goals of Healthy People 2020 (HP2020) related to cardiovascular disease and stroke. What activity would best meet this goal?
a. Teach high school students heart-healthy living.
b. Participate in blood pressure screenings at the mall.
c. Provide pamphlets on heart disease at the grocery store.
d. Set up an Ask the nurse booth at the pet store.

ANS: B
An important goal of HP2020 is to increase the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high. Participating in blood pressure screening in a public spot will best help meet that goal. The other options are all appropriate but do not specifically help meet a goal.

DIF: Applying/Application REF: 725
KEY: Hypertension| primary prevention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

24. A client has been diagnosed with a deep vein thrombosis and is to be discharged on warfarin (Coumadin). The client is adamant about refusing the drug because its dangerous. What action by the nurse is best?
a. Assess the reason behind the clients fear.

b. Remind the client about laboratory monitoring.
c. Tell the client drugs are safer today than before.
d. Warn the client about consequences of noncompliance.

ANS: A
The first step is to assess the reason behind the clients fear, which may be related to the experience of someone the client knows who took warfarin. If the nurse cannot address the specific rationale, teaching will likely be unsuccessful. Laboratory monitoring once every few weeks may not make the client perceive the drug to be safe. General statements like drugs are safer today do not address the root cause of the problem. Warning the client about possible consequences of not taking the drug is not therapeutic and is likely to lead to an adversarial relationship.

DIF: Applying/Application REF: 723
KEY: Psychosocial response| anticoagulants| therapeutic communication| patient-centered care MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

25. A client with a history of heart failure and hypertension is in the clinic for a follow-up visit. The client is or lisinopril (Prinivil) and warfarin (Coumadin). The client reports new-onset cough. What action by the nurse is most appropriate?
a. Assess the clients lung sounds and oxygenation.
b. Instruct the client on another antihypertensive.
c. Obtain a set of vital signs and document them.
d. Remind the client that cough is a side effect of Prinivil.

ANS: A
This client could be having an exacerbation of heart failure or be experiencing a side effect of lisinopril (and other angiotensin-converting enzyme inhibitors). The nurse should assess the clients lung sounds and other signs of oxygenation first. The client may or may not need to switch antihypertensive medications. Vital signs and documentation are important, but the nurse should assess the respiratory system first. If the cough turns out to be a side effect, reminding the client is appropriate, but then more action needs to be taken.

DIF: Applying/Application REF: 729
KEY: Nursing assessment| angiotensin-converting enzyme (ACE) inhibitors| heart failure| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

26. A nurse is caring for a client with a nonhealing arterial lower leg ulcer. What action by the nurse is best?
a. Consult with the Wound Ostomy Care Nurse.
b. Give pain medication prior to dressing changes.
c. Maintain sterile technique for dressing changes.
d. Prepare the client for eventual amputation.

ANS: A
A nonhealing wound needs the expertise of the Wound Ostomy Care Nurse (or Wound Ostomy Continence Nurse). Premedicating prior to painful procedures and maintaining sterile technique are helpful, but if the wound is not healing, more needs to be done. The client may need an amputation, but other options need to be tried first.

DIF: Applying/Application REF: 748
KEY: Peripheral vascular disease| consultation| wound care
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

27. A client has peripheral arterial disease (PAD). What statement by the client indicates misunderstanding about self-management activities?
a. I can use a heating pad on my legs if its set on low.
b. I should not cross my legs when sitting or lying down.
c. I will go out and buy some warm, heavy socks to wear.

d. Its going to be really hard but I will stop smoking.

ANS: A
Clients with PAD should never use heating pads as skin sensitivity is diminished and burns can result. The other statements show good understanding of self-management.

DIF: Evaluating/Synthesis REF: 736
KEY: Peripheral arterial disease| patient education| patient safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

28. A client presents to the emergency department with a severely lacerated artery. What is the priority action for the nurse?
a. Administer oxygen via non-rebreather mask.
b. Ensure the client has a patent airway.
c. Prepare to assist with suturing the artery.
d. Start two large-bore IVs with normal saline.

ANS: B
Airway always takes priority, followed by breathing and circulation. The nurse ensures the client has a patent airway prior to providing any other care measures.

DIF: Applying/Application REF: 750
KEY: Critical rescue| primary survey| trauma
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

29. The nurse is assessing a client on admission to the hospital. The clients leg appears as shown below:

What action by the nurse is best?
a. Assess the clients ankle-brachial index.
b. Elevate the clients leg above the heart.
c. Obtain an ice pack to provide comfort.
d. Prepare to teach about heparin sodium.

ANS: A
This client has dependent rubor, a classic finding in peripheral arterial disease. The nurse should measure the clients ankle-brachial index. Elevating the leg above the heart will further impede arterial blood flow. Ice will cause vasoconstriction, also impeding circulation and perhaps causing tissue injury. Heparin sodium is not the drug of choice for this condition.

DIF: Applying/Application REF: 734
KEY: Peripheral vascular disease| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. What nonpharmacologic comfort measures should the nurse include in the plan of care for a client with severe varicose veins? (Select all that apply.)
a. Administering mild analgesics for pain
b. Applying elastic compression stockings
c. Elevating the legs when sitting or lying
d. Reminding the client to do leg exercises
e. Teaching the client about surgical options

ANS: B, C, D
The three Es of care for varicose veins include elastic compression hose, exercise, and elevation. Mild analgesics are not a nonpharmacologic measure. Teaching about surgical options is not a comfort measure.

DIF: Understanding/Comprehension REF: 750
KEY: Peripheral vascular disease| nonpharmacologic comfort measures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

2. A nurse is preparing a client for a femoropopliteal bypass operation. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Administering preoperative medication
b. Ensuring the consent is signed
c. Marking pulses with a pen
d. Raising the siderails on the bed
e. Recording baseline vital signs

ANS: D, E
The UAP can raise the siderails of the bed for client safety and take and record the vital signs. Administering medications, ensuring a consent is on the chart, and marking the pulses for later comparison should be done by the registered nurse. This is also often done by the postanesthesia care nurse and is part of the hand-off report.

DIF: Applying/Application REF: 737
KEY: Delegation| preoperative nursing| patient safety| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A client has been bedridden for several days after major abdominal surgery. What action does the nurse delegate to the unlicensed assistive personnel (UAP) for deep vein thrombosis (DVT) prevention? (Select all that apply.)
a. Apply compression stockings.
b. Assist with ambulation.
c. Encourage coughing and deep breathing.
d. Offer fluids frequently.
e. Teach leg exercises.

ANS: A, B, D
The UAP can apply compression stockings, assist with ambulation, and offer fluids frequently to help prevent DVT. The UAP can also encourage the client to do pulmonary exercises, but these do not decrease the risk of DVT. Teaching is a nursing function.

DIF: Applying/Application REF: 745
KEY: Deep vein thrombosis| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A nurse is caring for a client on IV infusion of heparin. What actions does this nurse include in the clients plan of care? (Select all that apply.)
a. Assess the client for bleeding.
b. Monitor the daily activated partial thromboplastin time (aPTT) results.
c. Stop the IV for aPTT above baseline.
d. Use an IV pump for the infusion.
e. Weigh the client daily on the same scale.

ANS: A, B, D
Assessing for bleeding, monitoring aPTT, and using an IV pump for the infusion are all important safety measures for heparin to prevent injury from bleeding. The aPTT needs to be 1.5 to 2 times normal in order to demonstrate that the heparin is therapeutic. Weighing the client is not related.

DIF: Applying/Application REF: 745
KEY: Anticoagulants| patient safety| injury prevention
MSC: Integrated Process: Nursing Process: Intervention
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A client is being discharged on warfarin (Coumadin) therapy. What discharge instructions is the nurse required to provide? (Select all that apply.)
a. Dietary restrictions
b. Driving restrictions
c. Follow-up laboratory monitoring
d. Possible drug-drug interactions
e. Reason to take medication

ANS: A, C, D, E
The Joint Commissions Core Measures state that clients being discharged on warfarin need instruction on follow-up monitoring, dietary restrictions, drug-drug interactions, and reason for compliance. Driving is typically not restricted.

DIF: Remembering/Knowledge REF: 747
KEY: Patient safety| Core Measures| anticoagulants| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. Which statements by the client indicate good understanding of foot care in peripheral vascular disease? (Select all that apply.)
a. A good abrasive pumice stone will keep my feet soft.
b. Ill always wear shoes if I can buy cheap flip-flops.
c. I will keep my feet dry, especially between the toes.
d. Lotion is important to keep my feet smooth and soft.
e. Washing my feet in room-temperature water is best.

ANS: C, D, E
Good foot care includes appropriate hygiene and injury prevention. Keeping the feet dry; wearing good, comfortable shoes; using lotion; washing the feet in room-temperature water; and cutting the nails straight across are all important measures. Abrasive material such as pumice stones should not be used. Cheap flip-flops may not fit well and wont offer much protection against injury.

DIF: Evaluating/Synthesis REF: 739
KEY: Peripheral vascular disease| injury prevention| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A nurse is caring for a client with a nonhealing arterial ulcer. The physician has informed the client about possibly needing to amputate the clients leg. The client is crying and upset. What actions by the nurse are best? (Select all that apply.)
a. Ask the client to describe his or her current emotions.
b. Assess the client for support systems and family.
c. Offer to stay with the client if he or she desires.
d. Relate how smoking contributed to this situation.
e. Tell the client that many people have amputations.

ANS: A, B, C
When a client is upset, the nurse should offer self by remaining with the client if desired. Other helpful measures include determining what and whom the client has for support systems and asking the client to describe what he or she is feeling. Telling the client how smoking has led to this situation will only upset the client further and will damage the therapeutic relationship. Telling the client that many people have amputations belittles the clients feelings.

DIF: Applying/Application REF: 739
KEY: Psychosocial response| coping| support| therapeutic communication
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

8. The nurse working in the emergency department knows that which factors are commonly related to

aneurysm formation? (Select all that apply.)
a. Atherosclerosis
b. Down syndrome
c. Frequent heartburn
d. History of hypertension
e. History of smoking

ANS: A, D, E
Atherosclerosis, hypertension, hyperlipidemia, and smoking are the most common related factors. Down syndrome and heartburn have no relation to aneurysm formation.

DIF: Remembering/Knowledge REF: 740
KEY: Peripheral vascular disorders| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9. A client with a known abdominal aortic aneurysm reports dizziness and severe abdominal pain. The nurse assesses the clients blood pressure at 82/40 mm Hg. What actions by the nurse are most important? (Select all that apply.)
a. Administer pain medication.
b. Assess distal pulses every 10 minutes.
c. Have the client sign a surgical consent.
d. Notify the Rapid Response Team.
e. Take vital signs every 10 minutes.

ANS: B, D, E
This client may have a ruptured/rupturing aneurysm. The nurse should notify the Rapid Response team and perform frequent client assessments. Giving pain medication will lower the clients blood pressure even further. The nurse cannot have the client sign a consent until the physician has explained the procedure.

DIF: Applying/Application REF: 741
KEY: Critical rescue| Rapid Response Team| medical emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

SHORT ANSWER

1. A nurse is caring for a client who weighs 220 pounds and is started on enoxaparin (Lovenox). How much enoxaparin does the nurse anticipate administering? (Record your answer using a whole number.) _____ mg

ANS:
90 mg
The dose of enoxaparin is 1 mg/kg body weight, not to exceed 90 mg. This client weighs 220 pounds (110 kg), and so will get the maximal dose.

DIF: Applying/Application REF: 746
KEY: Anticoagulants| medication administration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 37: Care of Patients with Shock

MULTIPLE CHOICE

1. A student is caring for a client who suffered massive blood loss after trauma. How does the student correlate the blood loss with the clients mean arterial pressure (MAP)?
a. It causes vasoconstriction and increased MAP.
b. Lower blood volume lowers MAP.
c. There is no direct correlation to MAP.
d. It raises cardiac output and MAP.

ANS: B
Lower blood volume will decrease MAP. The other answers are not accurate.

DIF: Remembering/Knowledge REF: 752
KEY: Mean arterial blood pressure| shock
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is caring for a client after surgery. The clients respiratory rate has increased from 12 to 18 breaths/min and the pulse rate increased from 86 to 98 beats/min since they were last assessed 4 hours ago. What action by the nurse is best?
a. Ask if the client needs pain medication.
b. Assess the clients tissue perfusion further.
c. Document the findings in the clients chart.
d. Increase the rate of the clients IV infusion.

ANS: B
Signs of the earliest stage of shock are subtle and may manifest in slight increases in heart rate, respiratory rate or blood pressure. Even though these readings are not out of the normal range, the nurse should conduct a thorough assessment of the client, focusing on indicators of perfusion. The client may need pain medication, but this is not the priority at this time. Documentation should be done thoroughly but is not the priority either. The nurse should not increase the rate of the IV infusion without an order.

DIF: Applying/Application REF: 755
KEY: Shock| perfusion| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. The nurse gets the hand-off report on four clients. Which client should the nurse assess first?
a. Client with a blood pressure change of 128/74 to 110/88 mm Hg
b. Client with oxygen saturation unchanged at 94%
c. Client with a pulse change of 100 to 88 beats/min
d. Client with urine output of 40 mL/hr for the last 2 hours

ANS: A
This client has a falling systolic blood pressure, rising diastolic blood pressure, and narrowing pulse pressure, all of which may be indications of the progressive stage of shock. The nurse should assess this client first. The client with the unchanged oxygen saturation is stable at this point. Although the client with a change in pulse has a slower rate, it is not an indicator of shock since the pulse is still within the normal range; it may indicate the clients pain or anxiety has been relieved, or he or she is sleeping or relaxing. A urine output of 40 mL/hr is only slightly above the normal range, which is 30 mL/hr.

DIF: Analyzing/Analysis REF: 755
KEY: Shock| perfusion| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A nurse is caring for a client after surgery who is restless and apprehensive. The unlicensed assistive

personnel (UAP) reports the vital signs and the nurse sees they are only slightly different from previous readings. What action does the nurse delegate next to the UAP?
a. Assess the client for pain or discomfort.
b. Measure urine output from the catheter.
c. Reposition the client to the unaffected side.
d. Stay with the client and reassure him or her.

ANS: B
Urine output changes are a sensitive early indicator of shock. The nurse should delegate emptying the urinary catheter and measuring output to the UAP as a baseline for hourly urine output measurements. The UAP cannot assess for pain. Repositioning may or may not be effective for decreasing restlessness, but does not take priority over physical assessments. Reassurance is a therapeutic nursing action, but the nurse needs to do more in this situation.

DIF: Applying/Application REF: 755
KEY: Shock| nursing assessment| renal system| delegation| unlicensed assistive personnel (UAP) MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A client is in shock and the nurse prepares to administer insulin for a blood glucose reading of 208 mg/dL. The spouse asks why the client needs insulin as the client is not a diabetic. What response by the nurse is best?
a. High glucose is common in shock and needs to be treated.
b. Some of the medications we are giving are to raise blood sugar.
c. The IV solution has lots of glucose, which raises blood sugar.
d. The stress of this illness has made your spouse a diabetic.

ANS: A
High glucose readings are common in shock, and best outcomes are the result of treating them and maintaining glucose readings in the normal range. Medications and IV solutions may raise blood glucose levels, but this is not the most accurate answer. The stress of the illness has not made the client diabetic.

DIF: Understanding/Comprehension REF: 766
KEY: Shock| patient education| hyperglycemia| insulin| endocrine system
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse caring for a client notes the following assessments: white blood cell count 3800/mm3, blood glucose level 198 mg/dL, and temperature 96.2 F (35.6 C). What action by the nurse takes priority?
a. Document the findings in the clients chart.
b. Give the client warmed blankets for comfort.
c. Notify the health care provider immediately.
d. Prepare to administer insulin per sliding scale.

ANS: C
This client has several indicators of sepsis with systemic inflammatory response. The nurse should notify the health care provider immediately. Documentation needs to be thorough but does not take priority. The client may appreciate warm blankets, but comfort measures do not take priority. The client may or may not need insulin.

DIF: Applying/Application REF: 762
KEY: Shock| nursing assessment| critical rescue| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse works at a community center for older adults. What self-management measure can the nurse teach the clients to prevent shock?
a. Do not get dehydrated in warm weather.
b. Drink fluids on a regular schedule.
c. Seek attention for any lacerations.

d. Take medications as prescribed.

ANS: B
Preventing dehydration in older adults is important because the age-related decrease in the thirst mechanism makes them prone to dehydration. Having older adults drink fluids on a regular schedule will help keep them hydrated without the influence of thirst (or lack of thirst). Telling clients not to get dehydrated is important, but not the best answer because it doesnt give them the tools to prevent it from occurring. Older adults should seek attention for lacerations, but this is not as important an issue as staying hydrated. Taking medications as prescribed may or may not be related to hydration.

DIF: Applying/Application REF: 756
KEY: Older adult| fluid and electrolyte imbalance| patient education| primary prevention
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A client arrives in the emergency department after being in a car crash with fatalities. The client has a nearly amputated leg that is bleeding profusely. What action by the nurse takes priority?
a. Apply direct pressure to the bleeding.
b. Ensure the client has a patent airway.
c. Obtain consent for emergency surgery.
d. Start two large-bore IV catheters.

ANS: B
Airway is the priority, followed by breathing and circulation (IVs and direct pressure). Obtaining consent is done by the physician.

DIF: Applying/Application REF: 752
KEY: Critical rescue| shock| primary survey
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A client is receiving norepinephrine (Levophed) for shock. What assessment finding best indicates a therapeutic effect from this drug?
a. Alert and oriented, answering questions
b. Client denial of chest pain or chest pressure
c. IV site without redness or swelling
d. Urine output of 30 mL/hr for 2 hours

ANS: A
Normal cognitive function is a good indicator that the client is receiving the benefits of norepinephrine. The brain is very sensitive to changes in oxygenation and perfusion. Norepinephrine can cause chest pain as an adverse reaction, so the absence of chest pain does not indicate therapeutic effect. The IV site is normal. The urine output is normal, but only minimally so.

DIF: Evaluating/Synthesis REF: 760
KEY: Shock| vasoconstrictors| nursing process evaluation| neurologic system
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A student nurse is caring for a client who will be receiving sodium nitroprusside (Nipride) via IV infusion. What action by the student causes the registered nurse to intervene?
a. Assessing the IV site before giving the drug
b. Obtaining a programmable (smart) IV pump
c. Removing the IV bag from the brown plastic cover
d. Taking and recording a baseline set of vital signs

ANS: C
Nitroprusside degrades in the presence of light, so it must be protected by leaving it in the original brown plastic bag when infusing. The other actions are correct, although a smart pump is not necessarily required if

the facility does not have them available. The drug must be administered via an IV pump, although the programmable pump is preferred for safety.

DIF: Applying/Application REF: 760
KEY: Vasoconstrictors| shock| supervision| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11. A client has been brought to the emergency department after being shot multiple times. What action should the nurse perform first?
a. Apply personal protective equipment.
b. Notify local law enforcement officials.
c. Obtain universal donor blood.
d. Prepare the client for emergency surgery.

ANS: A
The nurses priority is to care for the client. Since the client has gunshot wounds and is bleeding, the nurse applies personal protective equipment (i.e., gloves) prior to care. This takes priority over calling law enforcement. Requesting blood bank products can be delegated. The nurse may or may not have to prepare the client for emergency surgery.

DIF: Applying/Application REF: 756
KEY: Standard Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. A nurse is caring for several clients at risk for shock. Which laboratory value requires the nurse to communicate with the health care provider?
a. Creatinine: 0.9 mg/dL
b. Lactate: 6 mmol/L
c. Sodium: 150 mEq/L
d. White blood cell count: 11,000/mm3

ANS: B
A lactate level of 6 mmol/L is high and is indicative of possible shock. A creatinine level of 0.9 mg/dL is normal. A sodium level of 150 mEq/L is high, but that is not related directly to shock. A white blood cell count of 11,000/mm3 is slightly high but is not as critical as the lactate level.

DIF: Analyzing/Analysis REF: 762
KEY: Shock| nursing assessment| laboratory values
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A client in shock is apprehensive and slightly confused. What action by the nurse is best?
a. Offer to remain with the client for awhile.
b. Prepare to administer antianxiety medication.
c. Raise all four siderails on the clients bed.
d. Tell the client everything possible is being done.

ANS: A
The nurses presence will be best to reassure this client. Antianxiety medication is not warranted as this will lower the clients blood pressure. Using all four siderails on a hospital bed is considered a restraint in most facilities, although the nurse should ensure the clients safety. Telling a confused client that everything is being done is not the most helpful response.

DIF: Applying/Application REF: 758
KEY: Psychosocial response| communication| caring| shock
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

14. A client is being discharged home after a large myocardial infarction and subsequent coronary artery bypass grafting surgery. The clients sternal wound has not yet healed. What statement by the client most indicates a higher risk of developing sepsis after discharge?
a. All my friends and neighbors are planning a party for me.
b. I hope I can get my water turned back on when I get home.
c. I am going to have my daughter scoop the cat litter box.
d. My grandkids are so excited to have me coming home!

ANS: B
All these statements indicate a potential for leading to infection once the client gets back home. A large party might include individuals who are themselves ill and contagious. Having litter boxes in the home can expose the client to microbes that can lead to infection. Small children often have upper respiratory infections and poor hand hygiene that spread germs. However, the most worrisome statement is the lack of running water for handwashing and general hygiene and cleaning purposes.

DIF: Analyzing/Analysis REF: 766
KEY: Shock| primary prevention| infection control
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A client in shock has been started on dopamine. What assessment finding requires the nurse to communicate with the provider immediately?
a. Blood pressure of 98/68 mm Hg
b. Pedal pulses 1+/4+ bilaterally
c. Report of chest heaviness
d. Urine output of 32 mL/hr

ANS: C
Chest heaviness or pain indicates myocardial ischemia, a possible adverse effect of dopamine. While taking dopamine, the oxygen requirements of the heart are increased due to increased myocardial workload, and may cause ischemia. Without knowing the clients previous blood pressure or pedal pulses, there is not enough information to determine if these are an improvement or not. A urine output of 32 mL/hr is acceptable.

DIF: Applying/Application REF: 760
KEY: Shock| vasoconstrictors| critical rescue
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. The student nurse studying shock understands that the common manifestations of this condition are directly related to which problems? (Select all that apply.)
a. Anaerobic metabolism
b. Hyperglycemia
c. Hypotension
d. Impaired renal perfusion
e. Increased perfusion

ANS: A, C
The common manifestations of shock, no matter the cause, are directly related to the effects of anaerobic metabolism and hypotension. Hyperglycemia, impaired renal function, and increased perfusion are not manifestations of shock.

DIF: Remembering/Knowledge REF: 753
KEY: Shock| pathophysiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. The nurse caring for hospitalized clients includes which actions on their care plans to reduce the possibility of the clients developing shock? (Select all that apply.)

a. Assessing and identifying clients at risk
b. Monitoring the daily white blood cell count
c. Performing proper hand hygiene
d. Removing invasive lines as soon as possible
e. Using aseptic technique during procedures

ANS: A, C, D, E
Assessing and identifying clients at risk for shock is probably the most critical action the nurse can take to prevent shock from occurring. Proper hand hygiene, using aseptic technique, and removing IV lines and catheters are also important actions to prevent shock. Monitoring laboratory values does not prevent shock but can indicate a change.

DIF: Applying/Application REF: 764
KEY: Shock| nursing assessment| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. The nurse caring frequently for older adults in the hospital is aware of risk factors that place them at a higher risk for shock. For what factors would the nurse assess? (Select all that apply.)
a. Altered mobility/immobility
b. Decreased thirst response
c. Diminished immune response
d. Malnutrition
e. Overhydration

ANS: A, B, C, D
Immobility, decreased thirst response, diminished immune response, and malnutrition can place the older adult at higher risk of developing shock. Overhydration is not a common risk factor for shock.

DIF: Remembering/Knowledge REF: 764
KEY: Shock| older adult| nursing process assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

4. A client is in the early stages of shock and is restless. What comfort measures does the nurse delegate to the nursing student? (Select all that apply.)
a. Bringing the client warm blankets
b. Giving the client hot tea to drink
c. Massaging the clients painful legs
d. Reorienting the client as needed
e. Sitting with the client for reassurance

ANS: A, D, E
The student can bring the client warm blankets, reorient the client as needed to decrease anxiety, and sit with the client for reassurance. The client should be NPO at this point, so hot tea is prohibited. Massaging the legs is not recommended as this can dislodge any clots present, which may lead to pulmonary embolism.

DIF: Applying/Application REF: 756
KEY: Shock| nonpharmacologic comfort interventions| delegation
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. The nurse is caring for a client with suspected severe sepsis. What does the nurse prepare to do within 3 hours of the client being identified as being at risk? (Select all that apply.)
a. Administer antibiotics.
b. Draw serum lactate levels.
c. Infuse vasopressors.
d. Measure central venous pressure.
e. Obtain blood cultures.

ANS: A, B, E
Within the first 3 hours of suspecting severe sepsis, the nurse should draw (or facilitate) serum lactate levels, obtain blood cultures (or other cultures), and administer antibiotics (after the cultures have been obtained). Infusing vasopressors and measuring central venous pressure are actions that should occur within the first 6 hours.

DIF: Remembering/Knowledge REF: 765
KEY: Shock| critical rescue| medical emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

SHORT ANSWER

1. A client with severe sepsis has a serum lactate level of 6.2 mmol/L. The client weighs 250 pounds. To infuse the amount of fluid this client requires in 24 hours, at what rate does the nurse set the IV pump? (Record your answer using a whole number.) ____ mL/hr

ANS:
142 mL/hr
The client weighs 250 pounds = 113.63636 kg. The fluid requirement for this client is 30 mL/kg = 3409 mL. To infuse this amount over 24 hours, set the pump at 142 mL/hr (3409/24 = 142).

DIF: Analyzing/Analysis REF: 759
KEY: IV fluids| fluid and electrolyte imbalance| critical rescue| sepsis| shock
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 38: Care of Patients with Acute Coronary Syndromes

MULTIPLE CHOICE

1. A client is receiving an infusion of tissue plasminogen activator (t-PA). The nurse assesses the client to be disoriented to person, place, and time. What action by the nurse is best?
a. Assess the clients pupillary responses.
b. Request a neurologic consultation.
c. Stop the infusion and call the provider.
d. Take and document a full set of vital signs.

ANS: C
A change in neurologic status in a client receiving t-PA could indicate intracranial hemorrhage. The nurse should stop the infusion and notify the provider immediately. A full assessment, including pupillary responses and vital signs, occurs next. The nurse may or may not need to call a neurologist.

DIF: Applying/Application REF: 779
KEY: Coronary artery disease| neurologic system| critical rescue| Rapid Response Team| thrombolytic agents
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A client received tissue plasminogen activator (t-PA) after a myocardial infarction and now is on an intravenous infusion of heparin. The clients spouse asks why the client needs this medication. What response by the nurse is best?
a. The t-PA didnt dissolve the entire coronary clot.
b. The heparin keeps that artery from getting blocked again.
c. Heparin keeps the blood as thin as possible for a longer time.
d. The heparin prevents a stroke from occurring as the t-PA wears off.

ANS: B
After the original intracoronary clot has dissolved, large amounts of thrombin are released into the bloodstream, increasing the chance of the vessel reoccluding. The other statements are not accurate. Heparin is not a blood thinner, although laypeople may refer to it as such.

DIF: Understanding/Comprehension REF: 779
KEY: Coronary artery disease| thrombolytic agents| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A client is in the hospital after suffering a myocardial infarction and has bathroom privileges. The nurse assists the client to the bathroom and notes the clients O2 saturation to be 95%, pulse 88 beats/min, and respiratory rate 16 breaths/min after returning to bed. What action by the nurse is best?
a. Administer oxygen at 2 L/min.
b. Allow continued bathroom privileges.
c. Obtain a bedside commode.
d. Suggest the client use a bedpan.

ANS: B
This clients physiologic parameters did not exceed normal during and after activity, so it is safe for the client tc continue using the bathroom. There is no indication that the client needs oxygen, a commode, or a bedpan.

DIF: Applying/Application REF: 780
KEY: Coronary artery disease| activity intolerance| vital signs| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nursing student is caring for a client who had a myocardial infarction. The student is confused because the client states nothing is wrong and yet listens attentively while the student provides education on lifestyle changes and healthy menu choices. What response by the faculty member is best?

a. Continue to educate the client on possible healthy changes.
b. Emphasize complications that can occur with noncompliance.
c. Tell the client that denial is normal and will soon go away.
d. You need to make sure the client understands this illness.

ANS: A
Clients are often in denial after a coronary event. The client who seems to be in denial but is compliant with treatment may be using a healthy form of coping that allows time to process the event and start to use problem-focused coping. The student should not discourage this type of denial and coping, but rather continue providing education in a positive manner. Emphasizing complications may make the client defensive and more anxious. Telling the client that denial is normal is placing too much attention on the process. Forcing the client to verbalize understanding of the illness is also potentially threatening to the client.

DIF: Understanding/Comprehension REF: 780
KEY: Coronary artery disease| psychosocial response| coping| therapeutic communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

5. A client undergoing hemodynamic monitoring after a myocardial infarction has a right atrial pressure of 0.5 mm Hg. What action by the nurse is most appropriate?
a. Level the transducer at the phlebostatic axis.
b. Lay the client in the supine position.
c. Prepare to administer diuretics.
d. Prepare to administer a fluid bolus.

ANS: D
Normal right atrial pressures are from 1 to 8 mm Hg. Lower pressures usually indicate hypovolemia, so the nurse should prepare to administer a fluid bolus. The transducer should remain leveled at the phlebostatic axis. Positioning may or may not influence readings. Diuretics would be contraindicated.

DIF: Applying/Application REF: 781
KEY: Coronary artery disease| hemodynamic monitoring| fluid and electrolyte imbalance
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A client has hemodynamic monitoring after a myocardial infarction. What safety precaution does the nurse implement for this client?
a. Document pulmonary artery wedge pressure (PAWP) readings and assess their trends.
b. Ensure the balloon does not remain wedged.
c. Keep the client on strict NPO status.
d. Maintain the client in a semi-Fowlers position.

ANS: B
If the balloon remains inflated, it can cause pulmonary infarction or rupture. The nurse should ensure the balloon remains deflated between PAWP readings. Documenting PAWP readings and assessing trends is an important nursing action related to hemodynamic monitoring, but is not specifically related to safety. The client does not have to be NPO while undergoing hemodynamic monitoring. Positioning may or may not affect readings.

DIF: Applying/Application REF: 781
KEY: Coronary artery disease| hemodynamic monitoring| equipment safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A client has intra-arterial blood pressure monitoring after a myocardial infarction. The nurse notes the clients heart rate has increased from 88 to 110 beats/min, and the blood pressure dropped from 120/82 to 100/60 mm Hg. What action by the nurse is most appropriate?
a. Allow the client to rest quietly.
b. Assess the client for bleeding.

c. Document the findings in the chart.
d. Medicate the client for pain.

ANS: B
A major complication related to intra-arterial blood pressure monitoring is hemorrhage from the insertion site. Since these vital signs are out of the normal range, are a change, and are consistent with blood loss, the nurse should assess the client for any bleeding associated with the arterial line. The nurse should document the findings after a full assessment. The client may or may not need pain medication and rest; the nurse first needs to rule out any emergent bleeding.

DIF: Applying/Application REF: 782
KEY: Coronary artery disease| intra-arterial blood pressure monitoring| equipment safety| vital signs MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A client is in the preoperative holding area prior to an emergency coronary artery bypass graft (CABG). The client is yelling at family members and tells the doctor to just get this over with when asked to sign the consent form. What action by the nurse is best?
a. Ask the family members to wait in the waiting area.
b. Inform the client that this behavior is unacceptable.
c. Stay out of the room to decrease the clients stress levels.
d. Tell the client that anxiety is common and that you can help.

ANS: D
Preoperative fear and anxiety are common prior to cardiac surgery, especially in emergent situations. The client is exhibiting anxiety, and the nurse should reassure the client that fear is common and offer to help. The other actions will not reduce the clients anxiety.

DIF: Applying/Application REF: 787
KEY: Coronary artery disease| preoperative nursing| psychosocial response| anxiety| coping| therapeutic communication MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

9. A client is in the clinic a month after having a myocardial infarction. The client reports sleeping well since moving into the guest bedroom. What response by the nurse is best?
a. Do you have any concerns about sexuality?
b. Im glad to hear you are sleeping well now.
c. Sleep near your spouse in case of emergency.
d. Why would you move into the guest room?

ANS: A
Concerns about resuming sexual activity are common after cardiac events. The nurse should gently inquire if this is the issue. While it is good that the client is sleeping well, the nurse should investigate the reason for the move. The other two responses are likely to cause the client to be defensive.

DIF: Applying/Application REF: 792
KEY: Coronary artery disease| sexuality| anxiety| therapeutic communication
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

10. A client in the cardiac stepdown unit reports severe, crushing chest pain accompanied by nausea and vomiting. What action by the nurse takes priority?
a. Administer an aspirin.
b. Call for an electrocardiogram (ECG).
c. Maintain airway patency.
d. Notify the provider.

ANS: C
Airway always is the priority. The other actions are important in this situation as well, but the nurse should stay

with the client and ensure the airway remains patent (especially if vomiting occurs) while another person calls the provider (or Rapid Response Team) and facilitates getting an ECG done. Aspirin will probably be administered, depending on the providers prescription and the clients current medications.

DIF: Applying/Application REF: 780
KEY: Coronary artery disease| critical rescue| medical emergencies
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. An older adult is on cardiac monitoring after a myocardial infarction. The client shows frequent dysrhythmias. What action by the nurse is most appropriate?
a. Assess for any hemodynamic effects of the rhythm.
b. Prepare to administer antidysrhythmic medication.
c. Notify the provider or call the Rapid Response Team.
d. Turn the alarms off on the cardiac monitor.

ANS: A
Older clients may have dysrhythmias due to age-related changes in the cardiac conduction system. They may have no significant hemodynamic effects from these changes. The nurse should first assess for the effects of the dysrhythmia before proceeding further. The alarms on a cardiac monitor should never be shut off. The other two actions may or may not be needed.

DIF: Applying/Application REF: 780
KEY: Coronary artery disease| older adult| pathophysiology| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

12. The nurse is preparing to change a clients sternal dressing. What action by the nurse is most important?
a. Assess vital signs.
b. Don a mask and gown.
c. Gather needed supplies.
d. Perform hand hygiene.

ANS: D
To prevent a sternal wound infection, the nurse washes hands or performs hand hygiene as a priority. Vital signs do not necessarily need to be assessed beforehand. A mask and gown are not needed. The nurse should gather needed supplies, but this is not the priority.

DIF: Applying/Application REF: 787
KEY: Coronary artery disease| infection control| hand hygiene
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A client has an intra-arterial blood pressure monitoring line. The nurse notes bright red blood on the clients sheets. What action should the nurse perform first?
a. Assess the insertion site.
b. Change the clients sheets.
c. Put on a pair of gloves.
d. Assess blood pressure.

ANS: C
For the nurses safety, he or she should put on a pair of gloves to prevent blood exposure. The other actions are appropriate as well, but first the nurse must don a pair of gloves.

DIF: Applying/Application REF: 782
KEY: Standard Precautions| infection control| intra-arterial blood pressure monitoring| staff safety MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

14. A nurse is in charge of the coronary intensive care unit. Which client should the nurse see first?
a. Client on a nitroglycerin infusion at 5 mcg/min, not titrated in the last 4 hours
b. Client who is 1 day post coronary artery bypass graft, blood pressure 180/100 mm Hg
c. Client who is 1 day post percutaneous coronary intervention, going home this morning
d. Client who is 2 days post coronary artery bypass graft, became dizzy this a.m. while walking

ANS: B
Hypertension after coronary artery bypass graft surgery can be dangerous because it puts too much pressure on the suture lines and can cause bleeding. The charge nurse should see this client first. The client who became dizzy earlier should be seen next. The client on the nitroglycerin drip is stable. The client going home can wait until the other clients are cared for.

DIF: Analyzing/Analysis REF: 788
KEY: Coronary artery disease| coronary artery bypass graft| collaboration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A client with coronary artery disease (CAD) asks the nurse about taking fish oil supplements. What response by the nurse is best?
a. Fish oil is contraindicated with most drugs for CAD.
b. The best source is fish, but pills have benefits too.
c. There is no evidence to support fish oil use with CAD.
d. You can reverse CAD totally with diet and supplements.

ANS: B
Omega-3 fatty acids have shown benefit in reducing lipid levels, in reducing the incidence of sudden cardiac death, and for stabilizing atherosclerotic plaque. The best source is fish three times a week or some fish oil supplements. The other options are not accurate.

DIF: Understanding/Comprehension REF: 772
KEY: Coronary artery disease| lipid-reducing agents| supplements| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

16. A client has presented to the emergency department with an acute myocardial infarction (MI). What action by the nurse is best to meet The Joint Commissions Core Measures outcomes?
a. Obtain an electrocardiogram (ECG) now and in the morning.
b. Give the client an aspirin.
c. Notify the Rapid Response Team.
d. Prepare to administer thrombolytics.

ANS: B
The Joint Commissions Core Measures set for acute MI require that aspirin is administered when a client with MI presents to the emergency department or when an MI occurs in the hospital. A rapid ECG is vital, but getting another one in the morning is not part of the Core Measures set. The Rapid Response Team is not needed if an emergency department provider is available. Thrombolytics may or may not be needed.

DIF: Remembering/Knowledge REF: 777
KEY: Coronary artery disease| Core Measures| The Joint Commission
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17. A nurse is caring for four clients. Which client should the nurse assess first?
a. Client with an acute myocardial infarction, pulse 102 beats/min
b. Client who is 1 hour post angioplasty, has tongue swelling and anxiety
c. Client who is post coronary artery bypass, chest tube drained 100 mL/hr
d. Client who is post coronary artery bypass, potassium 4.2 mEq/L

ANS: B

The post-angioplasty client with tongue swelling and anxiety is exhibiting manifestations of an allergic reaction that could progress to anaphylaxis. The nurse should assess this client first. The client with a heart rate of 102 beats/min may have increased oxygen demands but is just over the normal limit for heart rate. The two post coronary artery bypass clients are stable.

DIF: Analyzing/Analysis REF: 785
KEY: Coronary artery disease| critical rescue| medical emergencies| hypersensitivities| allergic reaction MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A nurse is caring for a client who is intubated and has an intra-aortic balloon pump. The client is restless and agitated. What action should the nurse perform first for comfort?
a. Allow family members to remain at the bedside.
b. Ask the family if the client would like a fan in the room.
c. Keep the television tuned to the clients favorite channel.
d. Speak loudly to the client in case of hearing problems.

ANS: A
Allowing the family to remain at the bedside can help calm the client with familiar voices (and faces if the client wakes up). A fan might be helpful but may also spread germs through air movement. The TV should not be kept on all the time to allow for rest. Speaking loudly may agitate the client more.

DIF: Applying/Application REF: 791
KEY: Intra-aortic balloon pump| nonpharmacologic comfort measures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

19. The nurse is caring for a client with a chest tube after a coronary artery bypass graft. The drainage slows significantly. What action by the nurse is most important?
a. Increase the setting on the suction.
b. Notify the provider immediately.
c. Re-position the chest tube.
d. Take the tubing apart to assess for clots.

ANS: B
If the drainage in the chest tube decreases significantly and dramatically, the tube may be blocked by a clot. This could lead to cardiac tamponade. The nurse should notify the provider immediately. The nurse should not independently increase the suction, re-position the chest tube, or take the tubing apart.

DIF: Applying/Application REF: 789
KEY: Coronary artery bypass graft| critical rescue| chest tubes| cardiovascular system
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

20. A home health care nurse is visiting an older client who lives alone after being discharged from the hospital after a coronary artery bypass graft. What finding in the home most causes the nurse to consider additional referrals?
a. Dirty carpets in need of vacuuming
b. Expired food in the refrigerator
c. Old medications in the kitchen
d. Several cats present in the home

ANS: B
Expired food in the refrigerator demonstrates a safety concern for the client and a possible lack of money to buy food. The nurse can consider a referral to Meals on Wheels or another home-based food program. Dirty carpets may indicate the client has no household help and is waiting for clearance to vacuum. Old medications can be managed by the home health care nurse and the client working collaboratively. Having pets is not a cause for concern.

DIF: Applying/Application REF: 792
KEY: Home safety| referrals| coronary artery bypass graft
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

21. A client is on a dopamine infusion via a peripheral line. What action by the nurse takes priority for safety?
a. Assess the IV site hourly.
b. Monitor the pedal pulses.
c. Monitor the clients vital signs.
d. Obtain consent for a central line.

ANS: A
Dopamine should be infused through a central line to prevent extravasation and necrosis of tissue. If it needs to be run peripherally, the nurse assesses the site hourly for problems. When the client is getting the central line, ensuring informed consent is on the chart is a priority. But at this point, the client has only a peripheral line, so caution must be taken to preserve the integrity of the clients integumentary system. Monitoring pedal pulses and vital signs give indications as to how well the drug is working.

DIF: Applying/Application REF: 784
KEY: Inotropic agents| adverse effects| medication safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

22. A client had an acute myocardial infarction. What assessment finding indicates to the nurse that a significant complication has occurred?
a. Blood pressure that is 20 mm Hg below baseline
b. Oxygen saturation of 94% on room air
c. Poor peripheral pulses and cool skin
d. Urine output of 1.2 mL/kg/hr for 4 hours

ANS: C
Poor peripheral pulses and cool skin may be signs of impending cardiogenic shock and should be reported immediately. A blood pressure drop of 20 mm Hg is not worrisome. An oxygen saturation of 94% is just slightly below normal. A urine output of 1.2 mL/kg/hr for 4 hours is normal.

DIF: Remembering/Knowledge REF: 783
KEY: Coronary artery disease| critical rescue| nursing assessment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

23. A client presents to the emergency department with an acute myocardial infarction (MI) at 1500 (3:00 PM). The facility has 24-hour catheterization laboratory abilities. To meet The Joint Commissions Core Measures set, by what time should the client have a percutaneous coronary intervention performed?
a. 1530 (3:30 PM)
b. 1600 (4:00 PM)
c. 1630 (4:30 PM)
d. 1700 (5:00 PM)

ANS: C
The Joint Commissions Core Measures set for MI includes percutaneous coronary intervention within 90 minutes of diagnosis of myocardial infarction. Therefore, the client should have a percutaneous coronary intervention performed no later than 1630 (4:30 PM).

DIF: Remembering/Knowledge REF: 785
KEY: Coronary artery disease| Core Measures| The Joint Commission
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

24. The provider requests the nurse start an infusion of an inotropic agent on a client. How does the nurse

explain the action of these drugs to the client and spouse?
a. It constricts vessels, improving blood flow.
b. It dilates vessels, which lessens the work of the heart.
c. It increases the force of the hearts contractions.
d. It slows the heart rate down for better filling.

ANS: C
A positive inotrope is a medication that increases the strength of the hearts contractions. The other options are not correct.

DIF: Remembering/Knowledge REF: 783
KEY: Coronary artery disease| inotropic agents| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

25. A nurse is assessing a client who had a myocardial infarction. Upon auscultating heart sounds, the nurse hears the following sound. What action by the nurse is most appropriate?
(Click the media button to hear the audio clip.)
a. Assess for further chest pain.
b. Call the Rapid Response Team.
c. Have the client sit upright.
d. Listen to the clients lung sounds.

ANS: D
The sound the nurse hears is an S3 heart sound, an abnormal sound that may indicate heart failure. The nurse should next assess the clients lung sounds. Assessing for chest pain is not directly related. There is no indication that the Rapid Response Team is needed. Having the client sit up will not change the heart sound.

DIF: Applying/Application REF: 773
KEY: Coronary artery disease| respiratory assessment| respiratory system| nursing assessment MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

26. A client had an inferior wall myocardial infarction (MI). The nurse notes the clients cardiac rhythm as shown below:

What action by the nurse is most important?
a. Assess the clients blood pressure and level of consciousness.
b. Call the health care provider or the Rapid Response Team.
c. Obtain a permit for an emergency temporary pacemaker insertion.
d. Prepare to administer antidysrhythmic medication.

ANS: A
Clients with an inferior wall MI often have bradycardia and blocks that lead to decreased perfusion, as seen in this ECG strip showing sinus bradycardia. The nurse should first assess the clients hemodynamic status, including vital signs and level of consciousness. The client may or may not need the Rapid Response Team, a temporary pacemaker, or medication; there is no indication of this in the question.

DIF: Analyzing/Analysis REF: 780
KEY: Coronary artery disease| dysrhythmias| nursing assessment| hemodynamic status
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. A nursing student learns about modifiable risk factors for coronary artery disease. Which factors does this include? (Select all that apply.)
a. Age
b. Hypertension

c. Obesity
d. Smoking
e. Stress

ANS: B, C, D, E
Hypertension, obesity, smoking, and excessive stress are all modifiable risk factors for coronary artery disease. Age is a nonmodifiable risk factor.

DIF: Remembering/Knowledge REF: 771
KEY: Coronary artery disease| lifestyle factors
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A nurse is caring for a client who had coronary artery bypass grafting yesterday. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Assist the client to the chair for meals and to the bathroom.
b. Encourage the client to use the spirometer every 4 hours.
c. Ensure the client wears TED hose or sequential compression devices.
d. Have the client rate pain on a 0-to-10 scale and report to the nurse.
e. Take and record a full set of vital signs per hospital protocol.

ANS: A, C, E
The nurse can delegate assisting the client to get up in the chair or ambulate to the bathroom, applying TEDs or sequential compression devices, and taking/recording vital signs. The spirometer should be used every hour the day after surgery. Assessing pain using a 0-to-10 scale is a nursing assessment, although if the client reports pain, the UAP should inform the nurse so a more detailed assessment is done.

DIF: Applying/Application REF: 779
KEY: Coronary artery disease| coronary artery bypass graft| delegation| activity| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nursing student studying acute coronary syndromes learns that the pain of a myocardial infarction (MI) differs from stable angina in what ways? (Select all that apply.)
a. Accompanied by shortness of breath
b. Feelings of fear or anxiety
c. Lasts less than 15 minutes
d. No relief from taking nitroglycerin
e. Pain occurs without known cause

ANS: A, B, D, E
The pain from an MI is often accompanied by shortness of breath and fear or anxiety. It lasts longer than 15 minutes and is not relieved by nitroglycerin. It occurs without a known cause such as exertion.

DIF: Remembering/Knowledge REF: 773
KEY: Coronary artery disease| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A client is 1 day postoperative after a coronary artery bypass graft. What nonpharmacologic comfort measures does the nurse include when caring for this client? (Select all that apply.)
a. Administer pain medication before ambulating.
b. Assist the client into a position of comfort in bed.
c. Encourage high-protein diet selections.
d. Provide complementary therapies such as music.
e. Remind the client to splint the incision when coughing.

ANS: B, D, E

Nonpharmacologic comfort measures can include positioning, complementary therapies, and splinting the chest incision. Medications are not nonpharmacologic. Food choices are not comfort measures.

DIF: Applying/Application REF: 792
KEY: Coronary artery disease| nonpharmacologic comfort measures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A nursing student planning to teach clients about risk factors for coronary artery disease (CAD) would include which topics? (Select all that apply.)
a. Advanced age
b. Diabetes
c. Ethnic background
d. Medication use
e. Smoking

ANS: A, B, C, E
Age, diabetes, ethnic background, and smoking are all risk factors for developing CAD; medication use is not.

DIF: Remembering/Knowledge REF: 771
KEY: Coronary artery disease| pathophysiology| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 39: Assessment of the Hematologic System

MULTIPLE CHOICE

1. A nursing student wants to know why clients with chronic obstructive pulmonary disease tend to be polycythemic. What response by the nurse instructor is best?
a. It is due to side effects of medications for bronchodilation.
b. It is from overactive bone marrow in response to chronic disease.
c. It combats the anemia caused by an increased metabolic rate.
d. It compensates for tissue hypoxia caused by lung disease.

ANS: D
In response to hypoxia, more red blood cells are made so more oxygen can be carried and delivered to tissues. This is a physiologic process in response to the disease; it is not a medication side effect, the result of overactive bone marrow, or a response to anemia.

DIF: Remembering/Knowledge REF: 797
KEY: Hematologic system| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A client is receiving rivaroxaban (Xarelto) and asks the nurse to explain how it works. What response by the nurse is best?
a. It inhibits thrombin.
b. It inhibits fibrinogen.
c. It thins your blood.
d. It works against vitamin K.

ANS: A
Rivaroxaban is a direct thrombin inhibitor. It does not work on fibrinogen or vitamin K. It is not a blood thinner, although many clients call anticoagulants by this name.

DIF: Understanding/Comprehension REF: 801
KEY: Hematologic system| anticoagulants
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. The health care provider tells the nurse that a client is to be started on a platelet inhibitor. About what drug does the nurse plan to teach the client?
a. Clopidogrel (Plavix)
b. Enoxaparin (Lovenox)
c. Reteplase (Retavase)
d. Warfarin (Coumadin)

ANS: A
Clopidogrel is a platelet inhibitor. Enoxaparin is an indirect thrombin inhibitor. Reteplase is a fibrinolytic agent. Warfarin is a vitamin K antagonist.

DIF: Remembering/Knowledge REF: 801
KEY: Hematologic system| anticoagulants
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse is assessing a dark-skinned client for pallor. What action is best?
a. Assess the conjunctiva of the eye.
b. Have the client open the hand widely.
c. Look at the roof of the clients mouth.
d. Palpate for areas of mild swelling.

ANS: A
To assess pallor in dark-skinned people, assess the conjunctiva of the eye or the mucous membranes. Looking at the roof of the mouth can reveal jaundice. Opening the hand widely is not related to pallor, nor is palpating for mild swelling.

DIF: Applying/Application REF: 801
KEY: Hematologic system| nursing assessment| anemia
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A hospitalized client has a platelet count of 58,000/mm3. What action by the nurse is best?
a. Encourage high-protein foods.
b. Institute neutropenic precautions.
c. Limit visitors to healthy adults.
d. Place the client on safety precautions.

ANS: D
With a platelet count between 40,000 and 80,000/mm3, clients are at risk of prolonged bleeding even after minor trauma. The nurse should place the client on safety precautions. High-protein foods, while healthy, are not the priority. Neutropenic precautions are not needed as the clients white blood cell count is not low. Limiting visitors would also be more likely related to a low white blood cell count.

DIF: Applying/Application REF: 802
KEY: Hematologic system| client safety| laboratory values
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

6. A client is having a bone marrow biopsy today. What action by the nurse takes priority?
a. Administer pain medication first.
b. Ensure valid consent is on the chart.
c. Have the client shower in the morning.
d. Premedicate the client with sedatives.

ANS: B
A bone marrow biopsy is an invasive procedure that requires informed consent. Pain medication and sedation are important components of care for this client but do not take priority. The client may or may not need or be able to shower.

DIF: Applying/Application REF: 805
KEY: Hematologic system| informed consent
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse is caring for four clients. After reviewing todays laboratory results, which client should the nurse see first?
a. Client with an international normalized ratio of 2.8
b. Client with a platelet count of 128,000/mm3
c. Client with a prothrombin time (PT) of 28 seconds
d. Client with a red blood cell count of 5.1 million/L

ANS: C
A normal PT is 11 to 12.5 seconds. This client is at high risk of bleeding. The other values are within normal limits.

DIF: Applying/Application REF: 805
KEY: Hematologic system| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A client is having a bone marrow biopsy and is extremely anxious. What action by the nurse is best?
a. Assess client fears and coping mechanisms.
b. Reassure the client this is a common test.
c. Sedate the client prior to the procedure.
d. Tell the client he or she will be asleep.

ANS: A
Assessing the clients specific fears and coping mechanisms helps guide the nurse in providing holistic care that best meets the clients needs. Reassurance will be helpful but is not the best option. Sedation is usually used. The client may or may not be totally asleep during the procedure.

DIF: Applying/Application REF: 805
KEY: Hematologic system| psychosocial response| caring| anxiety| support
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

9. A client is having a radioisotopic imaging scan. What action by the nurse is most important?
a. Assess the client for shellfish allergies.
b. Place the client on radiation precautions.
c. Sedate the client before the scan.
d. Teach the client about the procedure.

ANS: D
The nurse should ensure that teaching is done and the client understands the procedure. Contrast dye is not used, so shellfish/iodine allergies are not related. The client will not be radioactive and does not need radiation precautions. Sedation is not used in this procedure.

DIF: Applying/Application REF: 776
KEY: Hematologic system| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A student nurse learns that the spleen has several functions. What functions do they include? (Select all that apply.)
a. Breaks down hemoglobin
b. Destroys old or defective red blood cells (RBCs)
c. Forms vitamin K for clotting
d. Stores extra iron in ferritin
e. Stores platelets not circulating

ANS: A, B, E
Functions of the spleen include breaking down hemoglobin released from RBCs, destroying old or defective RBCs, and storing the platelets that are not in circulation. Forming vitamin K for clotting and storing extra iron in ferritin are functions of the liver.

DIF: Remembering/Knowledge REF: 797
KEY: Hematologic system MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. An older client asks the nurse why people my age have weaker immune systems than younger people. What responses by the nurse are best? (Select all that apply.)
a. Bone marrow produces fewer blood cells.
b. You may have decreased levels of circulating platelets.
c. You have lower levels of plasma proteins in the blood.
d. Lymphocytes become more reactive to antigens.
e. Spleen function declines after age 60.

ANS: A, C
The aging adult has bone marrow that produces fewer cells and decreased blood volume with fewer plasma proteins. Platelet numbers remain unchanged, lymphocytes become less reactive, and spleen function stays the same.

DIF: Understanding/Comprehension REF: 798
KEY: Hematologic system MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A nursing student learns that many drugs can impair the immune system. Which drugs does this include? (Select all that apply.)
a. Acetaminophen (Tylenol)
b. Amphotericin B (Fungizone)
c. Ibuprofen (Motrin)
d. Metformin (Glucophage)
e. Nitrofurantoin (Macrobid)

ANS: B, C, E
Amphotericin B, ibuprofen, and nitrofurantoin all can disrupt the hematologic (immune) system. Acetaminophen and metformin do not.

DIF: Remembering/Knowledge REF: 801
KEY: Hematologic system| adverse effects
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse works in a gerontology clinic. What age-related changes cause the nurse to alter standard assessment techniques from those used for younger adults? (Select all that apply.)
a. Dentition deteriorates with more cavities.
b. Nail beds may be thickened or discolored.
c. Progressive loss of hair occurs with age.
d. Sclerae begin to turn yellow or pale.
e. Skin becomes dry as the client ages.

ANS: B, C, E
Common findings in older adults include thickened or discolored nail beds, dry skin, and thinning hair. The nurse adapts to these changes by altering assessment techniques. Having more dental caries and changes in the sclerae are not normal age-related changes.

DIF: Remembering/Knowledge REF: 800
KEY: Hematologic system| older adult| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 40: Care of Patients with Hematologic Problems

MULTIPLE CHOICE

1. A nurse caring for a client with sickle cell disease (SCD) reviews the clients laboratory work. Which finding should the nurse report to the provider?
a. Creatinine: 2.9 mg/dL
b. Hematocrit: 30%
c. Sodium: 147 mEq/L
d. White blood cell count: 12,000/mm3

ANS: A
An elevated creatinine indicates kidney damage, which occurs in SCD. A hematocrit level of 30% is an expected finding, as is a slightly elevated white blood cell count. A sodium level of 147 mEq/L, although slightly high, is not concerning.

DIF: Applying/Application REF: 811
KEY: Hematologic system| laboratory values| anemias
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A client hospitalized with sickle cell crisis frequently asks for opioid pain medications, often shortly after receiving a dose. The nurses on the unit believe the client is drug seeking. When the client requests pain medication, what action by the nurse is best?
a. Give the client pain medication if it is time for another dose.
b. Instruct the client not to request pain medication too early.
c. Request the provider leave a prescription for a placebo.
d. Tell the client it is too early to have more pain medication.

ANS: A
Clients with sickle cell crisis often have severe pain that is managed with up to 48 hours of IV opioid analgesics. Even if the client is addicted and drug seeking, he or she is still in extreme pain. If the client can receive another dose of medication, the nurse should provide it. The other options are judgmental and do not address the clients pain. Giving placebos is unethical.

DIF: Applying/Application REF: 811
KEY: Hematologic system| anemias| pain| caring
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A client in sickle cell crisis is dehydrated and in the emergency department. The nurse plans to start an IV. Which fluid choice is best?
a. 0.45% normal saline
b. 0.9% normal saline
c. Dextrose 50% (D50)
d. Lactated Ringers solution

ANS: A
Because clients in sickle cell crisis are often dehydrated, the fluid of choice is a hypotonic solution such as 0.45% normal saline. 0.9% normal saline and lactated Ringers solution are isotonic. D50 is hypertonic and not used for hydration.

DIF: Applying/Application REF: 812
KEY: Hematologic system| anemias| fluid and electrolyte imbalance| IV fluids| hydration
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A client presents to the emergency department in sickle cell crisis. What intervention by the nurse takes priority?

a. Administer oxygen.
b. Apply an oximetry probe.
c. Give pain medication.
d. Start an IV line.

ANS: A
All actions are appropriate, but remembering the ABCs, oxygen would come first. The main problem in a sickle cell crisis is tissue and organ hypoxia, so providing oxygen helps halt the process.

DIF: Applying/Application REF: 812
KEY: Hematologic system| anemias| oxygen| oxygen therapy
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A client has a serum ferritin level of 8 ng/mL and microcytic red blood cells. What action by the nurse is best?
a. Encourage high-protein foods.
b. Perform a Hemoccult test on the clients stools.
c. Offer frequent oral care.
d. Prepare to administer cobalamin (vitamin B12).

ANS: B
This client has laboratory findings indicative of iron deficiency anemia. The most common cause of this disorder is blood loss, often from the GI tract. The nurse should perform a Hemoccult test on the clients stools. High-protein foods may help the condition, but dietary interventions take time to work. That still does not determine the cause. Frequent oral care is not related. Cobalamin injections are for pernicious anemia.

DIF: Applying/Application REF: 814
KEY: Hematologic system| anemias| laboratory values
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A client has Crohns disease. What type of anemia is this client most at risk for developing?
a. Folic acid deficiency
b. Fanconis anemia
c. Hemolytic anemia
d. Vitamin B12 anemia

ANS: A
Malabsorption syndromes such as Crohns disease leave a client prone to folic acid deficiency. Fanconis anemia, hemolytic anemia, and vitamin B12 anemia are not related to Crohns disease.

DIF: Remembering/Knowledge REF: 814
KEY: Hematologic system| anemias
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse in a hematology clinic is working with four clients who have polycythemia vera. Which client should the nurse see first?
a. Client with a blood pressure of 180/98 mm Hg
b. Client who reports shortness of breath
c. Client who reports calf tenderness and swelling
d. Client with a swollen and painful left great toe

ANS: B
Clients with polycythemia vera often have clotting abnormalities due to the hyperviscous blood with sluggish flow. The client reporting shortness of breath may have a pulmonary embolism and should be seen first. The client with a swollen calf may have a deep vein thrombosis and should be seen next. High blood pressure and gout symptoms are common findings with this disorder.

DIF: Applying/Application REF: 815
KEY: Polycythemia vera| nursing assessment| respiratory system| hematologic system| pulmonary embolism
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nursing student is caring for a client with leukemia. The student asks why the client is still at risk for infection when the clients white blood cell count (WBC) is high. What response by the registered nurse is best?
a. If the WBCs are high, there already is an infection present.
b. The client is in a blast crisis and has too many WBCs.
c. There must be a mistake; the WBCs should be very low.
d. Those WBCs are abnormal and dont provide protection.

ANS: D
In leukemia, the WBCs are abnormal and do not provide protection to the client against infection. The other statements are not accurate.

DIF: Understanding/Comprehension REF: 818
KEY: Leukemia| infection| laboratory values
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9. The family of a neutropenic client reports the client is not acting right. What action by the nurse is the priority?
a. Ask the client about pain.
b. Assess the client for infection.
c. Delegate taking a set of vital signs.
d. Look at todays laboratory results.

ANS: B
Neutropenic clients often do not have classic manifestations of infection, but infection is the most common cause of death in neutropenic clients. The nurse should assess for infection. The nurse should assess for pain but this is not the priority. The nurse should take the clients vital signs instead of delegating them since the client has had a change in status. Laboratory results may be inconclusive.

DIF: Applying/Application REF: 819
KEY: Neutropenia| infection| hematologic system| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse is caring for a client who is about to receive a bone marrow transplant. To best help the client cope with the long recovery period, what action by the nurse is best?
a. Arrange a visitation schedule among friends and family.
b. Explain that this process is difficult but must be endured.
c. Help the client find things to hope for each day of recovery.
d. Provide plenty of diversionary activities for this time.

ANS: C
Providing hope is an essential nursing function during treatment for any disease process, but especially during the recovery period after bone marrow transplantation, which can take up to 3 weeks. The nurse can help the client look ahead to the recovery period and identify things to hope for during this time. Visitors are important to clients, but may pose an infection risk. Telling the client the recovery period must be endured does not acknowledge his or her feelings. Diversionary activities are important, but not as important as instilling hope.

DIF: Applying/Application REF: 823
KEY: Psychosocial response| caring| hematologic system| bone marrow transplant
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

11. A nursing student is struggling to understand the process of graft-versus-host disease. What explanation by

the nurse instructor is best?
a. Because of immunosuppression, the donor cells take over.
b. Its like a transfusion reaction because no perfect matches exist.
c. The clients cells are fighting donor cells for dominance.
d. The donors cells are actually attacking the clients cells.

ANS: D
Graft versus host disease is an autoimmune-type process in which the donor cells recognize the clients cells as foreign and begin attacking them. The other answers are not accurate.

DIF: Understanding/Comprehension REF: 823
KEY: Hematologic system| bone marrow transplant
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. The nurse is caring for a client with leukemia who has the priority problem of fatigue. What action by the client best indicates that an important goal for this problem has been met?
a. Doing activities of daily living (ADLs) using rest periods
b. Helping plan a daily activity schedule
c. Requesting a sleeping pill at night
d. Telling visitors to leave when fatigued

ANS: A
Fatigue is a common problem for clients with leukemia. This client is managing his or her own ADLs using rest periods, which indicates an understanding of fatigue and how to control it. Helping to plan an activity schedule is a lesser indicator. Requesting a sleeping pill does not help control fatigue during the day. Asking visitors to leave when tired is another lesser indicator. Managing ADLs using rest periods demonstrates the most comprehensive management strategy.

DIF: Evaluating/Synthesis REF: 818
KEY: Hematologic system| leukemia| sleep and rest| activity
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

13. A nurse is caring for a young male client with lymphoma who is to begin treatment. What teaching topic is a priority?
a. Genetic testing
b. Infection prevention
c. Sperm banking
d. Treatment options

ANS: C
All teaching topics are important to the client with lymphoma, but for a young male, sperm banking is of particular concern if the client is going to have radiation to the lower abdomen or pelvis.

DIF: Understanding/Comprehension REF: 827
KEY: Lymphoma| hematologic system| caring| reproductive problems
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

14. A client has been admitted after sustaining a humerus fracture that occurred when picking up the family cat. What test result would the nurse correlate to this condition?
a. Bence-Jones protein in urine
b. Epstein-Barr virus: positive
c. Hemoglobin: 18 mg/dL
d. Red blood cell count: 8.2/mm3

ANS: A
This client has possible multiple myeloma. A positive Bence-Jones protein finding would correlate with this

condition. The Epstein-Barr virus is a herpesvirus that causes infectious mononucleosis and some cancers. A hemoglobin of 18 mg/dL is slightly high for a male and somewhat high for a female; this can be caused by several conditions, and further information would be needed to correlate this value with a specific medical condition. A red blood cell count of 8.2/mm3 is also high, but again, more information would be needed to correlate this finding with a specific medical condition.

DIF: Applying/Application REF: 829
KEY: Hematologic system| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A client with multiple myeloma demonstrates worsening bone density on diagnostic scans. About what drug does the nurse plan to teach this client?
a. Bortezomib (Velcade)
b. Dexamethasone (Decadron)
c. Thalidomide (Thalomid)
d. Zoledronic acid (Zometa)

ANS: D
All the options are drugs used to treat multiple myeloma, but the drug used specifically for bone manifestations is zoledronic acid (Zometa), which is a bisphosphonate. This drug class inhibits bone resorption and is used to treat osteoporosis as well.

DIF: Applying/Application REF: 829
KEY: Hematologic system| bisphosphonates| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A client with autoimmune idiopathic thrombocytopenic purpura (ITP) has had a splenectomy and returned to the surgical unit 2 hours ago. The nurse assesses the client and finds the abdominal dressing saturated with blood. What action is most important?
a. Preparing to administer a blood transfusion
b. Reinforcing the dressing and documenting findings
c. Removing the dressing and assessing the surgical site
d. Taking a set of vital signs and notifying the surgeon

ANS: D
While some bloody drainage on a new surgical dressing is expected, a saturated dressing is not. This client is already at high risk of bleeding due to the ITP. The nurse should assess vital signs for shock and notify the surgeon immediately. The client may or may not need a transfusion. Reinforcing the dressing is an appropriate action, but the nurse needs to do more than document afterward. Removing the dressing increases the risk of infection; plus, it is not needed since the nurse knows where the bleeding is coming from.

DIF: Applying/Application REF: 830
KEY: Hematologic system| nursing assessment| surgical procedures| dressings| postoperative care MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

17. A client has a platelet count of 9000/mm3. The nurse finds the client confused and mumbling. What action takes priority?
a. Calling the Rapid Response Team
b. Delegating taking a set of vital signs
c. Instituting bleeding precautions
d. Placing the client on bedrest

ANS: A
With a platelet count this low, the client is at high risk of spontaneous bleeding. The most disastrous complication would be intracranial bleeding. The nurse needs to call the Rapid Response Team as this client has manifestations of a sudden neurologic change. The nurse should not delegate the vital signs as the client is

no longer stable. Bleeding precautions will not address the immediate situation. Placing the client on bedrest or putting the client back into bed is important, but the critical action is to call for immediate medical attention.

DIF: Applying/Application REF: 830
KEY: Hematologic system| laboratory values| critical rescue| neurologic system
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A nurse is preparing to administer a blood transfusion. What action is most important?
a. Correctly identifying client using two identifiers
b. Ensuring informed consent is obtained if required
c. Hanging the blood product with Ringers lactate
d. Staying with the client for the entire transfusion

ANS: B
If the facility requires informed consent for transfusions, this action is most important because it precedes the other actions taken during the transfusion. Correctly identifying the client and blood product is a National Patient Safety Goal, and is the most important action after obtaining informed consent. Ringers lactate is not used to transfuse blood. The nurse does not need to stay with the client for the duration of the transfusion.

DIF: Applying/Application REF: 815
KEY: Informed consent| blood transfusions| hematologic system
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nurse is preparing to hang a blood transfusion. Which action is most important?
a. Documenting the transfusion
b. Placing the client on NPO status
c. Placing the client in isolation
d. Putting on a pair of gloves

ANS: D
To prevent bloodborne illness, the nurse should don a pair of gloves prior to hanging the blood. Documentation is important but not the priority at this point. NPO status and isolation are not needed.

DIF: Applying/Application REF: 831
KEY: Blood transfusion| hematologic system| Standard Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

20. A client receiving a blood transfusion develops anxiety and low back pain. After stopping the transfusion, what action by the nurse is most important?
a. Documenting the events in the clients medical record
b. Double-checking the client and blood product identification
c. Placing the client on strict bedrest until the pain subsides
d. Reviewing the clients medical record for known allergies

ANS: B
This client had a hemolytic transfusion reaction, most commonly caused by blood type or Rh incompatibility. The nurse should double-check all identifying information for both the client and blood type. Documentation occurs after the client is stable. Bedrest may or may not be needed. Allergies to medications or environmental items is not related.

DIF: Analyzing/Analysis REF: 833
KEY: Blood transfusion| Core Measures| transfusion reaction
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

21. A client has thrombocytopenia. What client statement indicates the client understands self-management of

this condition?
a. I brush and use dental floss every day.
b. I chew hard candy for my dry mouth.
c. I usually put ice on bumps or bruises.
d. Nonslip socks are best when I walk.

ANS: C
The client should be taught to apply ice to areas of minor trauma. Flossing is not recommended. Hard foods should be avoided. The client should wear well-fitting shoes when ambulating.

DIF: Evaluating/Synthesis REF: 824
KEY: Hematologic system| patient safety| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

22. A client has a sickle cell crisis with extreme lower extremity pain. What comfort measure does the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Apply ice packs to the clients legs.
b. Elevate the clients legs on pillows.
c. Keep the lower extremities warm.
d. Place elastic bandage wraps on the clients legs.

ANS: C
During a sickle cell crisis, the tissue distal to the occlusion has decreased blood flow and ischemia, leading to pain. Due to decreased blood flow, the clients legs will be cool or cold. The UAP can attempt to keep the clients legs warm. Ice and elevation will further decrease perfusion. Elastic bandage wraps are not indicated and may constrict perfusion in the legs.

DIF: Applying/Application REF: 812
KEY: Anemias| nonpharmacologic comfort measures| delegation| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

23. A client admitted for sickle cell crisis is distraught after learning her child also has the disease. What response by the nurse is best?
a. Both you and the father are equally responsible for passing it on.
b. I can see you are upset. I can stay here with you a while if you like.
c. Its not your fault; there is no way to know who will have this disease.
d. There are many good treatments for sickle cell disease these days.

ANS: B
The best response is for the nurse to offer self, a therapeutic communication technique that uses presence. Attempting to assign blame to both parents will not help the client feel better. There is genetic testing available, so it is inaccurate to state there is no way to know who will have the disease. Stating that good treatments exist belittles the clients feelings.

DIF: Applying/Application REF: 813
KEY: Psychosocial response| therapeutic communication| coping
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

24. A client with sickle cell disease (SCD) takes hydroxyurea (Droxia). The client presents to the clinic reporting an increase in fatigue. What laboratory result should the nurse report immediately?
a. Hematocrit: 25%
b. Hemoglobin: 9.2 mg/dL
c. Potassium: 3.2 mEq/L
d. White blood cell count: 38,000/mm3

ANS: D

Although individuals with SCD often have elevated white blood cell (WBC) counts, this extreme elevation could indicate leukemia, a complication of taking hydroxyurea. The nurse should report this finding immediately. Alternatively, it could indicate infection, a serious problem for clients with SCD. Hematocrit and hemoglobin levels are normally low in people with SCD. The potassium level, while slightly low, is not as worrisome as the WBCs.

DIF: Analyzing/Analysis REF: 816
KEY: Anemias| medication adverse effects| laboratory values
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

25. A nurse is caring for four clients with leukemia. After hand-off report, which client should the nurse see first?
a. Client who had two bloody diarrhea stools this morning
b. Client who has been premedicated for nausea prior to chemotherapy
c. Client with a respiratory rate change from 18 to 22 breaths/min
d. Client with an unchanged lesion to the lower right lateral malleolus

ANS: A
The client who had two bloody diarrhea stools that morning may be hemorrhaging in the gastrointestinal (GI) tract and should be assessed first. The client with the change in respiratory rate may have an infection or worsening anemia and should be seen next. The other two clients are not a priority at this time.

DIF: Applying/Application REF: 819
KEY: Anemias| gastrointestinal system| hematologic system| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

26. A client has frequent hospitalizations for leukemia and is worried about functioning as a parent to four small children. What action by the nurse would be most helpful?
a. Assist the client to make sick day plans for household responsibilities.
b. Determine if there are family members or friends who can help the client.
c. Help the client inform friends and family that they will have to help out.
d. Refer the client to a social worker in order to investigate respite child care.

ANS: A
While all options are reasonable choices, the best option is to help the client make sick day plans, as that is more comprehensive and inclusive than the other options, which focus on a single item.

DIF: Applying/Application REF: 825
KEY: Anemias| psychosocial response| coping| therapeutic communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

27. A client has been treated for a deep vein thrombus and today presents to the clinic with petechiae. Laboratory results show a platelet count of 42,000/mm3. The nurse reviews the clients medication list to determine if the client is taking which drug?
a. Enoxaparin (Lovenox)
b. Salicylates (aspirin)
c. Unfractionated heparin
d. Warfarin (Coumadin)

ANS: C
This client has manifestations of heparin-induced thrombocytopenia. Enoxaparin, salicylates, and warfarin do not cause this condition.

DIF: Applying/Application REF: 831
KEY: Heparins| thrombocytopenia| laboratory values
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

28. The nurse assesses a clients oral cavity and makes the discovery shown in the photo below:

What action by the nurse is most appropriate?
a. Encourage the client to have genetic testing.
b. Instruct the client on high-fiber foods.
c. Place the client in protective precautions.
d. Teach the client about cobalamin therapy.

ANS: D
This condition is known as glossitis, and is characteristic of B12 anemia. If the anemia is a pernicious anemia, it is treated with cobalamin. Genetic testing is not a priority for this condition. The client does not need high-fiber foods or protective precautions.

DIF: Applying/Application REF: 814
KEY: Hematologic system| anemias| patient education| medications
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A nurse working with clients with sickle cell disease (SCD) teaches about self-management to prevent exacerbations and sickle cell crises. What factors should clients be taught to avoid? (Select all that apply.)
a. Dehydration
b. Exercise
c. Extreme stress
d. High altitudes
e. Pregnancy

ANS: A, C, D, E
Several factors cause red blood cells to sickle in SCD, including dehydration, extreme stress, high altitudes, and pregnancy. Strenuous exercise can also cause sickling, but not unless it is very vigorous.

DIF: Remembering/Knowledge REF: 809
KEY: Hematologic system| patient education| genetic alterations| anemias
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A student studying leukemias learns the risk factors for developing this disorder. Which risk factors does this include? (Select all that apply.)
a. Chemical exposure
b. Genetically modified foods
c. Ionizing radiation exposure
d. Vaccinations
e. Viral infections

ANS: A, C, E
Chemical and ionizing radiation exposure and viral infections are known risk factors for developing leukemia. Eating genetically modified food and receiving vaccinations are not known risk factors.

DIF: Remembering/Knowledge REF: 817
KEY: Leukemia| pathophysiology MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A client has Hodgkins lymphoma, Ann Arbor stage Ib. For what manifestations should the nurse assess the client? (Select all that apply.)
a. Headaches
b. Night sweats

c. Persistent fever
d. Urinary frequency
e. Weight loss

ANS: B, C, E
In this stage, the disease is located in a single lymph node region or a single nonlymph node site. The client displays night sweats, persistent fever, and weight loss. Headache and urinary problems are not related.

DIF: Understanding/Comprehension REF: 827
KEY: Hematologic system| lymphoma| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A client has a platelet count of 25,000/mm3. What actions does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Assist with oral hygiene using a firm toothbrush.
b. Give the client an enema if he or she is constipated.
c. Help the client choose soft foods from the menu.
d. Shave the male client with an electric razor.
e. Use a lift sheet when needed to re-position the client.

ANS: C, D, E
This client has thrombocytopenia and requires bleeding precautions. These include oral hygiene with a soft-bristled toothbrush or swabs, avoiding rectal trauma, eating soft foods, shaving with an electric razor, and using a lift sheet to re-position the client.

DIF: Applying/Application REF: 824
KEY: Patient safety| anemias| laboratory results| delegation| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A student nurse is helping a registered nurse with a blood transfusion. Which actions by the student are most appropriate? (Select all that apply.)
a. Hanging the blood product using normal saline and a filtered tubing set
b. Taking a full set of vital signs prior to starting the blood transfusion
c. Telling the client someone will remain at the bedside for the first 5 minutes
d. Using gloves to start the clients IV if needed and to handle the blood product
e. Verifying the clients identity, and checking blood compatibility and expiration time

ANS: A, B, D
Correct actions prior to beginning a blood transfusion include hanging the product with saline and the correct filtered blood tubing, taking a full set of vital signs prior to starting, and using gloves. Someone stays with the client for the first 15 to 30 minutes of the transfusion. Two registered nurses must verify the clients identity and blood compatibility.

DIF: Applying/Application REF: 832
KEY: Blood transfusions| patient safety| Core Measures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

6. A student nurse is learning about blood transfusion compatibilities. What information does this include? (Select all that apply.)
a. Donor blood type A can donate to recipient blood type AB.
b. Donor blood type B can donate to recipient blood type O.
c. Donor blood type AB can donate to anyone.
d. Donor blood type O can donate to anyone.
e. Donor blood type A can donate to recipient blood type B.

ANS: A, D

Blood type A can be donated to people who have blood types A or AB. Blood type O can be given to anyone. Blood type B can be donated to people who have blood types B or AB. Blood type AB can only go to recipients with blood type AB.

DIF: Remembering/Knowledge REF: 834
KEY: Blood transfusions| patient safety MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A client with chronic anemia has had many blood transfusions. What medications does the nurse anticipate teaching the client about adding to the regimen? (Select all that apply.)
a. Azacitidine (Vidaza)
b. Darbepoetin alfa (Aranesp)
c. Decitabine (Dacogen)
d. Epoetin alfa (Epogen)
e. Methylprednisolone (Solu-Medrol)

ANS: B, D
Darbepoetin alfa and epoetin alfa are both red blood cell colony-stimulating factors that will help increase the production of red blood cells. Azacitidine and decitabine are used for myelodysplastic syndromes. Methylprednisolone is a steroid and would not be used for this problem.

DIF: Remembering/Knowledge REF: 816
KEY: Anemias| colony-stimulating factors
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A nurse is preparing to administer a blood transfusion to an older adult. Understanding age-related changes, what alterations in the usual protocol are necessary for the nurse to implement? (Select all that apply.)
a. Assess vital signs more often.
b. Hold other IV fluids running.
c. Premedicate to prevent reactions.
d. Transfuse smaller bags of blood.
e. Transfuse each unit over 8 hours.

ANS: A, B
The older adult needs vital signs monitored as often as every 15 minutes for the duration of the transfusion because changes may be the only indication of a transfusion-related problem. To prevent fluid overload, the nurse obtains a prescription to hold other running IV fluids during the transfusion. The other options are not warranted.

DIF: Remembering/Knowledge REF: 833
KEY: Anemias| blood transfusions| older adults
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

9. A client has heparin-induced thrombocytopenia (HIT). The student nurse asks how this is treated. About what drugs does the nurse instructor teach? (Select all that apply.)
a. Argatroban (Argatroban)
b. Bivalirudin (Angiomax)
c. Clopidogrel (Plavix)
d. Lepirudin (Refludan)
e. Methylprednisolone (Solu-Medrol)

ANS: A, B, D
The standard drugs used to treat HIT are argatroban, bivalirudin, and lepirudin. The other drugs are not used. Clopidogrel is an antiplatelet agent used to reduce the likelihood of stroke or myocardial infarction. Methylprednisolone is a steroid used to reduce inflammation.

DIF: Understanding/Comprehension REF: 831

KEY: Heparins| thrombocytopenia MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A client has received a bone marrow transplant and is waiting for engraftment. What actions by the nurse are most appropriate? (Select all that apply.)
a. Not allowing any visitors until engraftment
b. Limiting the protein in the clients diet
c. Placing the client in protective precautions
d. Teaching visitors appropriate hand hygiene
e. Telling visitors not to bring live flowers or plants

ANS: C, D, E
The client waiting for engraftment after bone marrow transplant has no white cells to protect him or her against infection. The client is on protective precautions and visitors are taught hand hygiene. No fresh flowers or plants are allowed due to the standing water in the vase or container that may harbor organisms. Limiting protein is not a healthy option and will not promote engraftment.

DIF: Applying/Application REF: 823
KEY: Anemias| protective precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 41: Assessment of the Nervous System

MULTIPLE CHOICE

1. A nurse prepares to teach a client who has experienced damage to the left temporal lobe of the brain. Which action should the nurse take when providing education about newly prescribed medications to this client?
a. Help the client identify each medication by its color.
b. Provide written materials with large print size.
c. Sit on the clients right side and speak into the right ear.
d. Allow the client to use a white board to ask questions.

ANS: C
The temporal lobe contains the auditory center for sound interpretation. The clients hearing will be impaired in the left ear. The nurse should sit on the clients right side and speak into the right ear. The other interventions do not address the clients left temporal lobe damage.

DIF: Applying/Application REF: 841
KEY: Patient education| brain trauma/injury/tumor
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse plans care for a client who has a hypoactive response to a test of deep tendon reflexes. Which intervention should the nurse include in this clients plan of care?
a. Check bath water temperature with a thermometer.
b. Provide the client with assistance when ambulating.
c. Place elastic support hose on the clients legs.
d. Assess the clients feet for wounds each shift.

ANS: B
Hypoactive deep tendon reflexes and loss of vibration sense can impair balance and coordination, predisposing the client to falls. The nurse should plan to provide the client with ambulation assistance to prevent injury. The other interventions do not address the clients problem.

DIF: Applying/Application REF: 848
KEY: Patient safety| motor/sensory impairment
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse teaches an 80-year-old client with diminished touch sensation. Which statement should the nurse include in this clients teaching?
a. Place soft rugs in your bathroom to decrease pain in your feet.
b. Bathe in warm water to increase your circulation.
c. Look at the placement of your feet when walking.
d. Walk barefoot to decrease pressure ulcers from your shoes.

ANS: C
Older clients with decreased sensation are at risk of injury from the inability to sense changes in terrain when walking. To compensate for this loss, the client is instructed to look at the placement of her or his feet when walking. Throw rugs can slip and increase fall risk. Bath water that is too warm places the client at risk for thermal injury. The client should wear sturdy shoes for ambulation.

DIF: Applying/Application REF: 846
KEY: Patient safety| motor/sensory impairment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse assesses a clients recent memory. Which client statement confirms that the clients remote memory is intact?
a. A young girl wrapped in a shroud fell asleep on a bed of clouds.

b. I was born on April 3, 1967, in Johnstown Community Hospital.
c. Apple, chair, and pencil are the words you just stated.
d. I ate oatmeal with wheat toast and orange juice for breakfast.

ANS: D
Asking clients about recent events that can be verified, such as what the client ate for breakfast, assesses the clients recent memory. The clients ability to make up a rhyme tests not memory, but rather a higher level of cognition. Asking clients about certain facts from the past that can be verified assesses remote or long-term memory. Asking the client to repeat words assesses the clients immediate memory.

DIF: Applying/Application REF: 849
KEY: Memory| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse assesses a client who demonstrates a positive Rombergs sign with eyes closed but not with eyes open. Which condition does the nurse associate with this finding?
a. Difficulty with proprioception
b. Peripheral motor disorder
c. Impaired cerebellar function
d. Positive pronator drift

ANS: A
The client who sways with eyes closed (positive Rombergs sign) but not with eyes open most likely has a disorder of proprioception and uses vision to compensate for it. The other options do not describe a positive Rombergs sign.

DIF: Applying/Application REF: 852
KEY: Motor/sensory impairment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse asks a client to take deep breaths during an electroencephalography. The client asks, Why are you asking me to do this? How should the nurse respond?
a. Hyperventilation causes vascular dilation of cerebral arteries, which decreases electoral activity in the brain.
b. Deep breathing helps you to relax and allows the electroencephalograph to obtain a better waveform.
c. Hyperventilation causes cerebral vasoconstriction and increases the likelihood of seizure activity.
d. Deep breathing will help you to blow off carbon dioxide and decreases intracranial pressures.

ANS: C
Hyperventilation produces cerebral vasoconstriction and alkalosis, which increases the likelihood of seizure activity. The client is asked to breathe deeply 20 to 30 times for 3 minutes. The other responses are not accurate.

DIF: Applying/Application REF: 859
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse assesses a client recovering from a cerebral angiography via the clients right femoral artery. Which assessment should the nurse complete?
a. Palpate bilateral lower extremity pulses.
b. Obtain orthostatic blood pressure readings.
c. Perform a funduscopic examination.
d. Assess the gag reflex prior to eating.

ANS: A
Cerebral angiography is performed by threading a catheter through the femoral or brachial artery. The extremity is kept immobilized after the procedure. The nurse checks the extremity for adequate circulation by

noting skin color and temperature, presence and quality of pulses distal to the injection site, and capillary refill. Clients usually are on bedrest; therefore, orthostatic blood pressure readings cannot be performed. The funduscopic examination would not be affected by cerebral angiography. The client is given analgesics but not conscious sedation; therefore, the clients gag reflex would not be compromised.

DIF: Applying/Application REF: 855
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A nurse obtains a focused health history for a client who is scheduled for magnetic resonance angiography. Which priority question should the nurse ask before the test?
a. Have you had a recent blood transfusion?
b. Do you have allergies to iodine or shellfish?
c. Are you taking any cardiac medications?
d. Do you currently use oral contraceptives?

ANS: B
Allergies to iodine and/or shellfish need to be explored because the client may have a similar reaction to the dye used in the procedure. In some cases, the client may need to be medicated with antihistamines or steroids before the test is given. A recent blood transfusion or current use of cardiac medications or oral contraceptives would not affect the angiography.

DIF: Applying/Application REF: 855
KEY: Assessment/diagnostic examination| allergies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A nurse is caring for a client with a history of renal insufficiency who is scheduled for a computed tomography scan of the head with contrast medium. Which priority intervention should the nurse implement?
a. Educate the client about strict bedrest after the procedure.
b. Place an indwelling urinary catheter to closely monitor output.
c. Obtain a prescription for intravenous fluids.
d. Contact the provider to cancel the procedure.

ANS: C
If a contrast medium is used, intravenous fluid may be given to promote excretion of the contrast medium. Contrast medium also may act as a diuretic, resulting in the need for fluid replacement. The client will not require bedrest. Although urinary output should be monitored closely, there is no need for an indwelling urinary catheter. There is no need to cancel the procedure as long as actions are taken to protect the kidneys.

DIF: Applying/Application REF: 857
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A nurse obtains a focused health history for a client who is scheduled for magnetic resonance imaging (MRI). Which condition should alert the nurse to contact the provider and cancel the procedure?
a. Creatine phosphokinase (CPK) of 100 IU/L
b. Atrioventricular graft
c. Blood urea nitrogen (BUN) of 50 mg/dL
d. Internal insulin pump

ANS: D
Metal devices such as internal pumps, pacemakers, and prostheses interfere with the accuracy of the image and can become displaced by the magnetic force generated by an MRI procedure. An atrioventricular graft does not contain any metal. CPK and BUN levels have no impact on an MRI procedure.

DIF: Understanding/Comprehension REF: 858

KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. A nurse teaches a client who is scheduled for a positron emission tomography scan of the brain. Which statement should the nurse include in this clients teaching?
a. Avoid caffeine-containing substances for 12 hours before the test.
b. Drink at least 3 liters of fluid during the first 24 hours after the test.
c. Do not take your cardiac medication the morning of the test.
d. Remove your dentures and any metal before the test begins.

ANS: A
Caffeine-containing liquids and foods are central nervous system stimulants and may alter the test results. No contrast is used; therefore, the client does not need to increase fluid intake. The client should take cardiac medications as prescribed. Metal does not have to be removed; this is done for magnetic resonance imaging.

DIF: Applying/Application REF: 856
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12. A nurse cares for a client who is experiencing deteriorating neurologic functions. The client states, I am worried I will not be able to care for my young children. How should the nurse respond?
a. Caring for your children is a priority. You may not want to ask for help, but you have to.
b. Our community has resources that may help you with some household tasks so you have energy to care for your children.
c. You seem distressed. Would you like to talk to a psychologist about adjusting to your changing status?
d. Give me more information about what worries you, so we can see if we can do something to make adjustments.

ANS: D
Investigate specific concerns about situational or role changes before providing additional information. The nurse should not tell the client what is or is not a priority for him or her. Although community resources may be available, they may not be appropriate for the client. Consulting a psychologist would not be appropriate without obtaining further information from the client related to current concerns.

DIF: Applying/Application REF: 854
KEY: Patient-centered care| therapeutic communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

13. A nurse plans care for an 83-year-old client who is experiencing age-related sensory perception changes. Which intervention should the nurse include in this clients plan of care?
a. Provide a call button that requires only minimal pressure to activate.
b. Write the date on the clients white board to promote orientation.
c. Ensure that the path to the bathroom is free from equipment.
d. Encourage the client to season food to stimulate nutritional intake.

ANS: C
Dementia and confusion are not common phenomena in older adults. However, physical impairment related to illness can be expected. Providing opportunities for hazard-free ambulation will maintain strength and mobility (and ensure safety). Providing a call button, providing the date, and seasoning food do not address the clients impaired sensory perception.

DIF: Applying/Application REF: 850
KEY: Patient safety| fall prevention| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

14. After teaching a client who is scheduled for magnetic resonance imaging (MRI), the nurse assesses the clients understanding. Which client statement indicates a correct understanding of the teaching?
a. I must increase my fluids because of the dye used for the MRI.
b. My urine will be radioactive so I should not share a bathroom.
c. I can return to my usual activities immediately after the MRI.
d. My gag reflex will be tested before I can eat or drink anything.

ANS: C
No postprocedure restrictions are imposed after MRI. The client can return to normal activities after the test is complete. There are no dyes or radioactive materials used for the MRI; therefore, increased fluids are not needed and the clients urine would not be radioactive. The procedure does not impact the clients gag reflex.

DIF: Applying/Application REF: 856
KEY: Assessment/diagnostic examination| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A nurse performs an assessment of pain discrimination on an older adult client. The client correctly identifies, with eyes closed, a sharp sensation on the right hand when touched with a pin. Which action should the nurse take next?
a. Touch the pin on the same area of the left hand.
b. Contact the provider with the assessment results.
c. Ask the client about current medications.
d. Continue the assessment on the clients feet.

ANS: A
If testing is begun on the right hand and the client correctly identifies the pain stimulus, the nurse should continue the assessment on the left hand. This is a normal finding and does not need to be reported to the provider, but instead documented in the clients chart. Medications do not need to be assessed in response to this finding. The nurse should assess the left hand prior to assessing the feet.

DIF: Understanding/Comprehension REF: 852
KEY: Assessment/diagnostic examination| motor/sensory impairment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

16. A nurse is teaching a client with cerebellar function impairment. Which statement should the nurse include in this clients discharge teaching?
a. Connect a light to flash when your door bell rings.
b. Label your faucet knobs with hot and cold signs.
c. Ask a friend to drive you to your follow-up appointments.
d. Use a natural gas detector with an audible alarm.

ANS: C
Cerebellar function enables the client to predict distance or gauge the speed with which one is approaching an object, control voluntary movement, maintain equilibrium, and shift from one skilled movement to another in an orderly sequence. A client who has cerebellar function impairment should not be driving. The client would not have difficulty hearing, distinguishing between hot and cold, or smelling.

DIF: Applying/Application REF: 841
KEY: Brain trauma/injury/tumor MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

17. A nurse delegates care to the unlicensed assistive personnel (UAP). Which statement should the nurse include when delegating care for a client with cranial nerve II impairment?
a. Tell the client where food items are on the breakfast tray.
b. Place the client in a high-Fowlers position for all meals.
c. Make sure the clients food is visually appetizing.
d. Assist the client by placing the fork in the left hand.

ANS: A
Cranial nerve II, the optic nerve, provides central and peripheral vision. A client who has cranial nerve II impairment will not be able to see, so the UAP should tell the client where different food items are on the meal tray. The other options are not appropriate for a client with cranial nerve II impairment.

DIF: Applying/Application REF: 845
KEY: Brain trauma/injury/tumor| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A nurse prepares a client for lumbar puncture (LP). Which assessment finding should alert the nurse to contact the health care provider?
a. Shingles on the clients back
b. Client is claustrophobic
c. Absence of intravenous access
d. Paroxysmal nocturnal dyspnea

ANS: A
An LP should not be performed if the client has a skin infection at or near the puncture site because of the risk of infection. A nurse would want to notify the health care provider if shingles were identified on the clients back. If a client has shortness of breath when lying flat, the LP can be adapted to meet the clients needs. Claustrophobia, absence of IV access, and paroxysmal nocturnal dyspnea have no impact on whether an LP can be performed.

DIF: Applying/Application REF: 859
KEY: Assessment/diagnostic examination| interdisciplinary team| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nurse assesses a client who is recovering from a lumbar puncture (LP). Which complication of this procedure should alert the nurse to urgently contact the health care provider?
a. Weak pedal pulses
b. Nausea and vomiting
c. Increased thirst
d. Hives on the chest

ANS: B
The nurse should immediately contact the provider if the client experiences a severe headache, nausea, vomiting, photophobia, or a change in level of consciousness after an LP, which are all signs of increased intracranial pressure. Weak pedal pulses, increased thirst, and hives are not complications of an LP.

DIF: Remembering/Knowledge REF: 841
KEY: Assessment/diagnostic examination| interdisciplinary team| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

20. A nurse cares for a client who is recovering from a single-photon emission computed tomography (SPECT) with a radiopharmaceutical agent. Which statement should the nurse include when discussing the plan of care with this client?
a. You may return to your previous activity level immediately.
b. You are radioactive and must use a private bathroom.
c. Frequent assessments of the injection site will be completed.
d. We will be monitoring your renal functions closely.

ANS: A
The client may return to his or her previous activity level immediately. Radioisotopes will be eliminated in the urine after SPECT, but no monitoring or special precautions are required. The injection site will not need to be assessed after the procedure is complete.

DIF: Applying/Application REF: 856
KEY: Assessment/diagnostic examination| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

21. A nurse assesses a client and notes the clients position as indicated in the illustration below:

How should the nurse document this finding?
a. Decorticate posturing
b. Decerebrate posturing
c. Atypical hyperreflexia
d. Spinal cord degeneration

ANS: A
The client is demonstrating decorticate posturing, which is seen with interruption in the corticospinal pathway. This finding is abnormal and is a sign that the clients condition has deteriorated. The physician, the charge nurse, and other health care team members should be notified immediately of this change in status. Decerebrate posturing consists of external rotation and extension of the extremities. Hyperreflexes present as increased reflex responses. Spinal cord degeneration presents frequently with pain and discomfort.

DIF: Applying/Application REF: 851
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

22. A nurse assesses the left plantar reflexes of an adult client and notes the response shown in the photograph below:

Which action should the nurse take next?
a. Contact the provider with this abnormal finding.
b. Assess bilateral legs for temperature and edema.
c. Ask the client about pain in the lower leg and calf.
d. Document the finding and continue the assessment.

ANS: A
This finding indicates Babinskis sign. In clients older than 2 years of age, Babinskis sign is considered abnormal and indicates central nervous system disease. The nurse should notify the health care provider and other members of the health care team because further investigation is warranted. This finding does not relate to perfusion of the leg or to pain. This is an abnormal assessment finding and should be addressed immediately.

DIF: Applying/Application REF: 851
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

23. A nurse assesses a client with a brain tumor. The client opens his eyes when the nurse calls his name, mumbles in response to questions, and follows simple commands. How should the nurse document this clients assessment using the Glasgow Coma Scale shown below?

a. 8
b. 10
c. 12
d. 14

ANS: C
The client opens his eyes to speech (Eye opening: To sound = 3), mumbles in response to questions (Verbal response: Inappropriate words = 3), and follows simple commands (Motor response: Obeys commands = 6). Therefore, the clients Glasgow Coma Scale score is: 3 + 3 + 6 = 12.

DIF: Applying/Application REF: 853
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse assesses a client with an injury to the medulla. Which clinical manifestations should the nurse expect to find? (Select all that apply.)
a. Loss of smell
b. Impaired swallowing
c. Visual changes
d. Inability to shrug shoulders
e. Loss of gag reflex

ANS: B, D, E
Cranial nerves IX (glossopharyngeal), X (vagus), XI (accessory), and XII (hypoglossal) emerge from the medulla, as do portions of cranial nerves VII (facial) and VIII (acoustic). Damage to these nerves causes impaired swallowing, inability to shrug shoulders, and loss of the gag reflex. The other manifestations are not associated with damage to the medulla.

DIF: Applying/Application REF: 842
KEY: Brain trauma/injury/tumor| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. An emergency department nurse assesses a client who was struck in the temporal lobe with a baseball. For which clinical manifestations that are related to a temporal lobe injury should the nurse assess? (Select all that apply.)
a. Memory loss
b. Personality changes
c. Difficulty with sound interpretation
d. Speech difficulties
e. Impaired taste

ANS: A, C, D
Wernickes area (language area) is located in the temporal lobe and enables the processing of words into coherent thought as well as the understanding of written or spoken words. The temporal lobe also is responsible for the auditory centers interpretation of sound and complicated memory patterns. Personality changes are related to frontal lobe injury. Impaired taste is associated with injury to the parietal lobe.

DIF: Remembering/Knowledge REF: 841
KEY: Brain trauma/injury/tumor| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. After administering a medication that stimulates the sympathetic division of the autonomic nervous system, the nurse assesses the client. For which clinical manifestations should the nurse assess? (Select all that apply.)
a. Decreased respiratory rate
b. Increased heart rate
c. Decreased level of consciousness
d. Increased force of contraction
e. Decreased blood pressure

ANS: B, D
Stimulation of the sympathetic nervous system initiates the fight-or-flight response, increasing both the heart rate and the force of contraction. A medication that stimulates the sympathetic nervous system would also increase the clients respiratory rate, blood pressure, and level of consciousness.

DIF: Applying/Application REF: 845
KEY: Medication safety| sympathetic medication
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse assesses a client with a brain tumor. Which newly identified assessment findings should alert the nurse to urgently communicate with the health care provider? (Select all that apply.)
a. Glasgow Coma Scale score of 8
b. Decerebrate posturing
c. Reactive pupils
d. Uninhibited speech
e. Diminished cognition

ANS: A, B, E
The nurse should urgently communicate changes in a clients neurologic status, including a decrease in the Glasgow Coma Scale score, abnormal flexion or extension, changes in cognition or speech, and pinpointed, dilated, and nonreactive pupils.

DIF: Applying/Application REF: 854
KEY: Brain trauma/injury/tumor
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse is caring for a client who is prescribed a computed tomography (CT) scan with iodine-based contrast. Which actions should the nurse take to prepare the client for this procedure? (Select all that apply.)
a. Ensure that an informed consent is present.
b. Ask the client about any allergies.
c. Evaluate the clients renal function.
d. Auscultate bilateral breath sounds.
e. Assess hematocrit and hemoglobin levels.

ANS: A, B, C
A client who is scheduled to receive iodine-based contrast should be asked about allergies, especially allergies to iodine or shellfish. The clients kidney function should also be evaluated to determine if it is safe to administer contrast during the procedure. Finally, the nurse should ensure that an informed consent is present because all clients receiving iodine-based contrast must give consent. The CT will have no impact on the clients breath sounds or hematocrit and hemoglobin levels. Findings from these assessments will not influence the clients safety during the procedure.

DIF: Understanding/Comprehension REF: 855
KEY: Assessment/diagnostic examination| allergies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse assesses an older client. Which assessment findings should the nurse identify as normal changes in the nervous system related to aging? (Select all that apply.)
a. Long-term memory loss
b. Slower processing time
c. Increased sensory perception
d. Decreased risk for infection
e. Change in sleep patterns

ANS: B, E
Normal changes in the nervous system related to aging include recent memory loss, slower processing time, decreased sensory perception, an increased risk for infection, changes in sleep patterns, changes in perception of pain, and altered balance and/or decreased coordination.

DIF: Remembering/Knowledge REF: 846
KEY: Aging| older adult

MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

7. A nurse delegates care for an older adult client to the unlicensed assistive personnel (UAP). Which statements should the nurse include when delegating this clients care? (Select all that apply.)
a. Plan to bathe the client in the evening when the client is most alert.
b. Encourage the client to use a cane when ambulating.
c. Assess the client for symptoms related to pain and discomfort.
d. Remind the client to look at foot placement when walking.
e. Schedule additional time for teaching about prescribed therapies.

ANS: A, B, D
The nurse should tell the UAP to schedule activities when the client is normally awake, encourage the client to use a cane when ambulating, and remind the client to look where feet are placed when walking. The nurse should assess the client for symptoms of pain and should provide sufficient time for older adults to process information, including new teaching. These are not items the nurse can delegate.

DIF: Applying/Application REF: 846
KEY: Older adult| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment

Chapter 42: Care of Patients with Problems of the CNS: The Brain

MULTIPLE CHOICE

1. A nurse is teaching a client who experiences migraine headaches and is prescribed a beta blocker. Which statement should the nurse include in this clients teaching?
a. Take this drug only when you have prodromal symptoms indicating the onset of a migraine headache.
b. Take this drug as ordered, even when feeling well, to prevent vascular changes associated with migraine headaches.
c. This drug will relieve the pain during the aura phase soon after a headache has started.
d. This medication will have no effect on your heart rate or blood pressure because you are taking it for migraines.

ANS: B
Beta blockers are prescribed as prophylactic treatment to prevent the vascular changes that initiate migraine headaches. Heart rate and blood pressure will also be affected, and the client should monitor these side effects. The other responses do not discuss appropriate uses of the medication.

DIF: Applying/Application REF: 860
KEY: Medication safety| beta blocker| migraine
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse assesses a client who has a history of migraines. Which clinical manifestation should the nurse identify as an early sign of a migraine with aura?
a. Vertigo
b. Lethargy
c. Visual disturbances
d. Numbness of the tongue

ANS: C
Early warning of impending migraine with aura usually consists of visual changes, flashing lights, or diplopia. The other manifestations are not associated with an impending migraine with aura.

DIF: Understanding/Comprehension REF: 858
KEY: Migraine| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse obtains a health history on a client prior to administering prescribed sumatriptan succinate (Imitrex) for migraine headaches. Which condition should alert the nurse to hold the medication and contact the health care provider?
a. Bronchial asthma
b. Prinzmetals angina
c. Diabetes mellitus
d. Chronic kidney disease

ANS: B
Sumatriptan succinate effectively reduces pain and other associated symptoms of migraine headache by binding to serotonin receptors and triggering cranial vasoconstriction. Vasoconstrictive effects are not confined to the cranium and can cause coronary vasospasm in clients with Prinzmetals angina. The other conditions would not affect the clients treatment.

DIF: Applying/Application REF: 860
KEY: Medication safety| migraine
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse assesses a client with a history of epilepsy who experiences stiffening of the muscles of the arms

and legs, followed by an immediate loss of consciousness and jerking of all extremities. How should the nurse document this activity?
a. Atonic seizure
b. Tonic-clonic seizure
c. Myoclonic seizure
d. Absence seizure

ANS: B
Seizure activity that begins with stiffening of the arms and legs, followed by loss of consciousness and jerking of all extremities, is characteristic of a tonic-clonic seizure. An atonic seizure presents as a sudden loss of muscle tone followed by postictal confusion. A myoclonic seizure presents with a brief jerking or stiffening of extremities that may occur singly or in groups. Absence seizures present with automatisms, and the client is unaware of his or her environment.

DIF: Understanding/Comprehension REF: 862
KEY: Seizure
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse witnesses a client begin to experience a tonic-clonic seizure and loss of consciousness. Which actior should the nurse take?
a. Start fluids via a large-bore catheter.
b. Turn the clients head to the side.
c. Administer IV push diazepam.
d. Prepare to intubate the client.

ANS: B
The nurse should turn the clients head to the side to prevent aspiration and allow drainage of secretions. Anticonvulsants are administered on a routine basis if a seizure is sustained. If the seizure is sustained (status epilepticus), the client must be intubated and should be administered oxygen, 0.9% sodium chloride, and IV push lorazepam or diazepam.

DIF: Applying/Application REF: 865
KEY: Seizure| aspiration precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse cares for a client who is experiencing status epilepticus. Which prescribed medication should the nurse prepare to administer?
a. Atenolol (Tenormin)
b. Lorazepam (Ativan)
c. Phenytoin (Dilantin)
d. Lisinopril (Prinivil)

ANS: B
Initially, intravenous lorazepam is administered to stop motor movements. This is followed by the administration of phenytoin. Atenolol, a beta blocker, and lisinopril, an angiotensin-converting enzyme inhibitor, are not administered for seizure activity. These medications are typically administered for hypertension and heart failure.

DIF: Applying/Application REF: 865
KEY: Seizure| benzodiazepine| medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. After teaching a client who is diagnosed with new-onset status epilepticus and prescribed phenytoin (Dilantin), the nurse assesses the clients understanding. Which statement by the client indicates a correct understanding of the teaching?
a. To prevent complications, I will drink at least 2 liters of water daily.

b. This medication will stop me from getting an aura before a seizure.
c. I will not drive a motor vehicle while taking this medication.
d. Even when my seizures stop, I will continue to take this drug.

ANS: D
Discontinuing antiepileptic drugs can lead to the recurrence of seizures or status epilepticus. The client does not need to drink more water and can drive while taking this medication. The medication will not stop an aura before a seizure.

DIF: Applying/Application REF: 865
KEY: Medication safety| seizure| antiepileptic
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. After teaching a client newly diagnosed with epilepsy, the nurse assesses the clients understanding. Which statement by the client indicates a need for additional teaching?
a. I will wear my medical alert bracelet at all times.
b. While taking my epilepsy medications, I will not drink any alcoholic beverages.
c. I will tell my doctor about my prescription and over-the-counter medications.
d. If I am nauseated, I will not take my epilepsy medication.

ANS: D
The nurse must emphasize that antiepileptic drugs must be taken even if the client is nauseous. Discontinuing the medication can predispose the client to seizure activity and status epilepticus. The client should not drink alcohol while taking seizure medications. The client should wear a medical alert bracelet and should make the doctor aware of all medications to prevent complications of polypharmacy.

DIF: Applying/Application REF: 864
KEY: Seizure| medication safety| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

9. A nurse obtains a focused health history for a client who is suspected of having bacterial meningitis. Which question should the nurse ask?
a. Do you live in a crowded residence?
b. When was your last tetanus vaccination?
c. Have you had any viral infections recently?
d. Have you traveled out of the country in the last month?

ANS: A
Meningococcal meningitis tends to occur in multiple outbreaks. It is most likely to occur in areas of high-density population, such as college dormitories, prisons, and military barracks. A tetanus vaccination would not place the client at increased risk for meningitis or protect the client from meningitis. A viral infection would not lead to bacterial meningitis but could lead to viral meningitis. Simply knowing if the client traveled out of the country does not provide enough information. The nurse should ask about travel to specific countries in which the disease is common, for example, sub-Saharan Africa.

DIF: Applying/Application REF: 867
KEY: Meningitis| infection control
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

10. After teaching the wife of a client who has Parkinson disease, the nurse assesses the wifes understanding. Which statement by the clients wife indicates she correctly understands changes associated with this disease?
a. His masklike face makes it difficult to communicate, so I will use a white board.
b. He should not socialize outside of the house due to uncontrollable drooling.
c. This disease is associated with anxiety causing increased perspiration.
d. He may have trouble chewing, so I will offer bite-sized portions.

ANS: D
Because chewing and swallowing can be problematic, small frequent meals and a supplement are better for meeting the clients nutritional needs. A masklike face and drooling are common in clients with Parkinson disease. The client should be encouraged to continue to socialize and communicate as normally as possible. The wife should understand that the clients masklike face can be misinterpreted and additional time may be needed for the client to communicate with her or others. Excessive perspiration is also common in clients with Parkinson disease and is associated with the autonomic nervous systems response.

DIF: Applying/Application REF: 872
KEY: Parkinson disease
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

11. A nurse plans care for a client with Parkinson disease. Which intervention should the nurse include in this clients plan of care?
a. Ambulate the client in the hallway twice a day.
b. Ensure a fluid intake of at least 3 liters per day.
c. Teach the client pursed-lip breathing techniques.
d. Keep the head of the bed at 30 degrees or greater.

ANS: D
Elevation of the head of the bed will help prevent aspiration. The other options will not prevent aspiration, which is the greatest respiratory complication of Parkinson disease, nor do these interventions address any of the complications of Parkinson disease. Ambulation in the hallway is usually implemented to prevent venous thrombosis. Increased fluid intake flushes out toxins from the clients blood. Pursed-lip breathing increases exhalation of carbon dioxide.

DIF: Applying/Application REF: 874
KEY: Parkinson disease| aspiration precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12. A nurse is teaching the daughter of a client who has Alzheimers disease. The daughter asks, Will the medication my mother is taking improve her dementia? How should the nurse respond?
a. It will allow your mother to live independently for several more years.
b. It is used to halt the advancement of Alzheimers disease but will not cure it.
c. It will not improve her dementia but can help control emotional responses.
d. It is used to improve short-term memory but will not improve problem solving.

ANS: C
Drug therapy is not effective for treating dementia or halting the advancement of Alzheimers disease. However, certain drugs may help suppress emotional disturbances and psychiatric manifestations. Medication therapy may not allow the client to safely live independently.

DIF: Applying/Application REF: 881
KEY: Alzheimers disease| safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse assesses a client with Alzheimers disease who is recently admitted to the hospital. Which psychosocial assessment should the nurse complete?
a. Assess religious and spiritual needs while in the hospital.
b. Identify the clients ability to perform self-care activities.
c. Evaluate the clients reaction to a change of environment.
d. Ask the client about relationships with family members.

ANS: C
As Alzheimers disease progresses, the client experiences changes in emotional and behavioral affect. The nurse should be alert to the clients reaction to a change in environment, such as being hospitalized, because the

client may exhibit an exaggerated response, such as aggression, to the event. The other assessments should be completed but are not as important as assessing the clients reaction to environmental change.

DIF: Applying/Application REF: 879
KEY: Alzheimers disease| psychosocial response
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

14. A nurse witnesses a client with late-stage Alzheimers disease eat breakfast. Afterward the client states, I am hungry and want breakfast. How should the nurse respond?
a. I see you are still hungry. I will get you some toast.
b. You ate your breakfast 30 minutes ago.
c. It appears you are confused this morning.
d. Your family will be here soon. Lets get you dressed.

ANS: A
Use of validation therapy with clients who have Alzheimers disease involves acknowledgment of the clients feelings and concerns. This technique has proved more effective in later stages of the disease, when using reality orientation only increases agitation. Telling the client that he or she already ate breakfast may agitate the client. The other statements do not validate the clients concerns.

DIF: Applying/Application REF: 880
KEY: Alzheimers disease| patient-centered care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Psychosocial Integrity

15. A nurse assesses a client after administering prescribed levetiracetam (Keppra). Which laboratory tests should the nurse monitor for potential adverse effects of this medication?
a. Serum electrolyte levels
b. Kidney function tests
c. Complete blood cell count
d. Antinuclear antibodies

ANS: B
Adverse effects of levetiracetam include coordination problems and renal toxicity. The other laboratory tests are not affected by levetiracetam.

DIF: Applying/Application REF: 864
KEY: Medication safety| seizure| antiepileptic
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A nurse cares for a client with advanced Alzheimers disease. The clients caregiver states, She is always wandering off. What can I do to manage this restless behavior? How should the nurse respond?
a. This is a sign of fatigue. The client would benefit from a daily nap.
b. Engage the client in scheduled activities throughout the day.
c. It sounds like this is difficult for you. I will consult the social worker.
d. The provider can prescribe a mild sedative for restlessness.

ANS: B
Several strategies may be used to cope with restlessness and wandering. One strategy is to engage the client in structured activities. Another is to take the client for frequent walks. Daily naps and a mild sedative will not be as effective in the management of restless behavior. Consulting the social worker does not address the caregivers concern.

DIF: Applying/Application REF: 882
KEY: Alzheimers disease| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

17. A nurse prepares to discharge a client with Alzheimers disease. Which statement should the nurse include in the discharge teaching for this clients caregiver?
a. Allow the client to rest most of the day.
b. Place a padded throw rug at the bedside.
c. Install deadbolt locks on all outside doors.
d. Provide a high-calorie and high-protein diet.

ANS: C
Clients with Alzheimers disease have a tendency to wander, especially at night. If possible, alarms should be installed on all outside doors to alert family members if the client leaves. At a minimum, all outside doors should have deadbolt locks installed to prevent the client from going outdoors unsupervised. The client should be allowed to exercise within his or her limits. Throw rugs are a slip and fall hazard and should be removed. The client should eat a well-balanced diet. There is no need for a high-calorie or high-protein diet.

DIF: Applying/Application REF: 883
KEY: Alzheimers disease| patient-centered care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

18. A nurse assesses a client with Huntington disease. Which motor changes should the nurse monitor for in this client?
a. Shuffling gait
b. Jerky hand movements
c. Continuous chewing motions
d. Tremors of the hands

ANS: B
An imbalance between excitatory and inhibitory neurotransmitters leads to uninhibited motor movements, such as brisk, jerky, purposeless movements of the hands, face, tongue, and legs. Shuffling gait, continuous chewing motions, and tremors are associated with Parkinson disease.

DIF: Remembering/Knowledge REF: 885
KEY: Huntington disease
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

19. A nurse cares for a client who has been diagnosed with the Huntington gene but has no symptoms. The client asks for options related to family planning. What is the nurses best response?
a. Most clients with the Huntington gene do not pass on Huntington disease to their children.
b. I understand that they can diagnose this disease in embryos. Therefore, you could select a healthy embryo from your fertilized eggs for implantation to avoid passing on Huntington disease.
c. The need for family planning is limited because one of the hallmarks of Huntington disease is infertility.
d. Tell me more specifically what information you need about family planning so that I can direct you to the right information or health care provider.

ANS: D
The presence of the Huntington gene means that the trait will be passed on to all offspring of the affected person. Understanding options for contraception and conception (e.g., surrogacy options) and implications for children may require the expertise of a genetic counselor or a reproductive specialist. The other statements are not accurate.

DIF: Applying/Application REF: 885
KEY: Huntington disease| genetic counseling
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

20. A nurse is teaching a client with chronic migraine headaches. Which statement related to complementary therapy should the nurse include in this clients teaching?
a. Place a warm compress on your forehead at the onset of the headache.

b. Wear dark sunglasses when you are in brightly lit spaces.
c. Lie down in a darkened room when you experience a headache.
d. Set your alarm to ensure you do not sleep longer than 6 hours at one time.

ANS: C
At the onset of a migraine attack, the client may be able to alleviate pain by lying down and darkening the room. He or she may want both eyes covered and a cool cloth on the forehead. If the client falls asleep, he or she should remain undisturbed until awakening. The other options are not recognized therapies for migraines.

DIF: Applying/Application REF: 860
KEY: Migraine| complementary/alternative medications
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

21. A nurse delegates care for a client with Parkinson disease to an unlicensed assistive personnel (UAP). Which statement should the nurse include when delegating this clients care?
a. Allow the client to be as independent as possible with activities.
b. Assist the client with frequent and meticulous oral care.
c. Assess the clients ability to eat and swallow before each meal.
d. Schedule appointments early in the morning to ensure rest in the afternoon.

ANS: A
Clients with Parkinson disease do not move as quickly and can have functional problems. The client should be encouraged to be as independent as possible and provided time to perform activities without rushing. Although oral care is important for all clients, instructing the UAP to provide frequent and meticulous oral is not a priority for this client. This statement would be a priority if the client was immune-compromised or NPO. The nurse should assess the clients ability to eat and swallow; this should not be delegated. Appointments and activities should not be scheduled early in the morning because this may cause the client to be rushed and discourage the client from wanting to participate in activities of daily living.

DIF: Applying/Application REF: 873
KEY: Parkinson disease| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

22. A nurse delegates care for a client with early-stage Alzheimers disease to an unlicensed assistive personnel (UAP). Which statement should the nurse include when delegating this clients care?
a. If she is confused, play along and pretend that everything is okay.
b. Remove the clock from her room so that she doesnt get confused.
c. Reorient the client to the day, time, and environment with each contact.
d. Use validation therapy to recognize and acknowledge the clients concerns.

ANS: C
Clients who have early-stage Alzheimers disease should be reoriented frequently to person, place, and time. The UAP should reorient the client and not encourage the clients delusions. The room should have a clock and white board with the current date written on it. Validation therapy is used with late-stage Alzheimers disease.

DIF: Applying/Application REF: 880
KEY: Alzheimers disease| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse plans care for a client with epilepsy who is admitted to the hospital. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Have suction equipment at the bedside.
b. Place a padded tongue blade at the bedside.
c. Permit only clear oral fluids.

d. Keep bed rails up at all times.
e. Maintain the client on strict bedrest.
f. Ensure that the client has IV access.

ANS: A, D, F
Oxygen and suctioning equipment with an airway must be readily available. The bed rails should be up at all times while the client is in the bed to prevent injury from a fall if the client has a seizure. If the client does not have an IV access, insert a saline lock, especially for those clients who are at significant risk for generalized tonic-clonic seizures. The saline lock provides ready access if IV drug therapy must be given to stop the seizure. Padded tongue blades may pose a danger to the client during a seizure and should not be used. Dietary restrictions and strict bedrest are not interventions associated with epilepsy. The client should be encouraged to eat a well-balanced diet and ambulate while in the hospital.

DIF: Applying/Application REF: 865
KEY: Seizure| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse is teaching a client who has chronic headaches. Which statements about headache triggers should the nurse include in this clients plan of care? (Select all that apply.)
a. Increase your intake of caffeinated beverages.
b. Incorporate physical exercise into your daily routine.
c. Avoid all alcoholic beverages.
d. Participate in a smoking cessation program.
e. Increase your intake of fruits and vegetables.

ANS: B, D, E
Triggers for headaches include caffeine, smoking, and ingestion of pickled foods, so these factors should be avoided. Clients are taught to eat a balanced diet and to get adequate exercise and rest. Alcohol does not trigger chronic headaches but can enhance headaches during the headache period.

DIF: Applying/Application REF: 861
KEY: Migraine| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A nurse evaluates the results of diagnostic tests on a clients cerebrospinal fluid (CSF). Which fluid results alerts the nurse to possible viral meningitis? (Select all that apply.)
a. Clear
b. Cloudy
c. Increased protein level
d. Normal glucose level
e. Bacterial organisms present
f. Increased white blood cells

ANS: A, C, D
In viral meningitis, CSF fluid is clear, protein levels are slightly increased, and glucose levels are normal. Viral meningitis does not cause cloudiness or increased turbidity of CSF. In bacterial meningitis, the presence of bacteria and white blood cells causes the fluid to be cloudy.

DIF: Applying/Application REF: 868
KEY: Meningitis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse assesses a client who is experiencing a cluster headache. Which clinical manifestations should the nurse expect to find? (Select all that apply.)
a. Ipsilateral tearing of the eye
b. Miosis
c. Abrupt loss of consciousness

d. Neck and shoulder tenderness
e. Nasal congestion
f. Exophthalmos

ANS: A, B, E
Cluster headache is usually accompanied by ipsilateral tearing, miosis, rhinorrhea or nasal congestion, ptosis, eyelid edema, and facial sweating. Abrupt loss of consciousness, neck and shoulder tenderness, and exophthalmos are not associated with cluster headaches.

DIF: Understanding/Comprehension REF: 861
KEY: Migraine| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse assesses a client who is experiencing an absence seizure. For which clinical manifestations should the nurse assess? (Select all that apply.)
a. Intermittent rigidity
b. Lip smacking
c. Sudden loss of muscle tone
d. Brief jerking of the extremities
e. Picking at clothing
f. Patting of the hand on the leg

ANS: B, E, F
Automatisms are characteristic of absence seizures. These behaviors consist of lip smacking, picking at clothing, and patting. Rigidity of muscles is associated with the tonic phase of a seizure, and jerking of the extremities is associated with the clonic phase of a seizure. Loss of muscle tone occurs with atonic seizures.

DIF: Understanding/Comprehension REF: 862
KEY: Seizure| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse prepares to provide perineal care to a client with meningococcal meningitis. Which personal protective equipment should the nurse wear? (Select all that apply.)
a. Particulate respirator
b. Isolation gown
c. Shoe covers
d. Surgical mask
e. Gloves

ANS: D, E
Meningeal meningitis is spread via saliva and droplets, and Droplet Precautions are necessary. Caregivers should wear a surgical mask when within 6 feet of the client and should continue to use Standard Precautions, including gloves. A particulate respirator, an isolation gown, and shoe covers are not necessary for Droplet Precautions.

DIF: Applying/Application REF: 869
KEY: Meningitis| infection control| Transmission-Based Precautions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A nurse assesses clients on a medical-surgical unit. Which clients should the nurse identify as at risk for secondary seizures? (Select all that apply.)
a. A 26-year-old woman with a left temporal brain tumor
b. A 38-year-old male client in an alcohol withdrawal program
c. A 42-year-old football player with a traumatic brain injury
d. A 66-year-old female client with multiple sclerosis
e. A 72-year-old man with chronic obstructive pulmonary disease

ANS: A, B, C
Clients at risk for secondary seizures include those with a brain lesion from a tumor or trauma, and those who are experiencing a metabolic disorder, acute alcohol withdrawal, electrolyte disturbances, and high fever. Clients with a history of stroke, heart disease, and substance abuse are also at risk. Clients with multiple sclerosis or chronic obstructive pulmonary disease are not at risk for secondary seizures.

DIF: Understanding/Comprehension REF: 862
KEY: Seizure| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse assesses a client who is recovering from the implantation of a vagal nerve stimulation device. For which clinical manifestations should the nurse assess as common complications of this procedure? (Select all that apply.)
a. Bleeding
b. Infection
c. Hoarseness
d. Dysphagia
e. Seizures

ANS: C, D
Complications of surgery to implant a vagal nerve stimulation device include hoarseness (most common), dyspnea, neck pain, and dysphagia. The device is tunneled under the skin with an electrode connected to the vagus nerve to control simple or complex partial seizures. Bleeding is not a common complication of this procedure, and infection would not occur during the recovery period.

DIF: Applying/Application REF: 866
KEY: Seizure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A nurse is caring for a client with meningitis. Which laboratory values should the nurse monitor to identify potential complications of this disorder? (Select all that apply.)
a. Sodium level
b. Liver enzymes
c. Clotting factors
d. Cardiac enzymes
e. Creatinine level

ANS: A, C
Inflammation associated with meningitis can stimulate the hypothalamus and result in excessive production of antidiuretic hormone. The nurse should monitor sodium levels for early identification of syndrome of inappropriate antidiuretic hormone. A systemic inflammatory response (SIR) can also occur with meningitis. A SIR can result in a coagulopathy that leads to disseminated intravascular coagulation. The nurse should monitor clotting factors to identify this complication. The other laboratory values are not specific to complications of meningitis.

DIF: Applying/Application REF: 868
KEY: Meningitis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A nurse assesses a client who has encephalitis. Which manifestations should the nurse recognize as signs of increased intracranial pressure (ICP), a complication of encephalitis? (Select all that apply.)
a. Photophobia
b. Dilated pupils
c. Headache
d. Widened pulse pressure

e. Bradycardia

ANS: B, D, E
Increased ICP is a complication of encephalitis. The nurse should monitor for signs of increased ICP, including dilated pupils, widened pulse pressure, bradycardia, irregular respirations, and less responsive pupils. Photophobia and headache are not related to increased ICP.

DIF: Applying/Application REF: 869
KEY: Encephalitis| intracranial pressure
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 43: Care of Patients with Problems of the CNS: The Spinal Cord

MULTIPLE CHOICE

1. A nurse promotes the prevention of lower back pain by teaching clients at a community center. Which instruction should the nurse include in this education?
a. Participate in an exercise program to strengthen muscles.
b. Purchase a mattress that allows you to adjust the firmness.
c. Wear flat instead of high-heeled shoes to work each day.
d. Keep your weight within 20% of your ideal body weight.

ANS: A
Exercise can strengthen back muscles, reducing the incidence of low back pain. The other options will not prevent low back pain.

DIF: Applying/Application REF: 889
KEY: Pain| spinal cord/back injury MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A nurse plans care for a client with lower back pain from a work-related injury. Which intervention should the nurse include in this clients plan of care?
a. Encourage the client to stretch the back by reaching toward the toes.
b. Massage the affected area with ice twice a day.
c. Apply a heating pad for 20 minutes at least four times daily.
d. Advise the client to avoid warm baths or showers.

ANS: C
Heat increases blood flow to the affected area and promotes healing of injured nerves. Stretching and ice will not promote healing, and there is no need to avoid warm baths or showers.

DIF: Understanding/Comprehension REF: 890
KEY: Spinal cord/back injury| nonpharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse assesses a client who is recovering from a diskectomy 6 hours ago. Which assessment finding should the nurse address first?
a. Sleepy but arouses to voice
b. Dry and cracked oral mucosa
c. Pain present in lower back
d. Bladder palpated above pubis

ANS: D
A distended bladder may indicate damage to the sacral spinal nerves. The other findings require the nurse to provide care but are not the priority or a complication of the procedure.

DIF: Applying/Application REF: 892
KEY: Back surgery| spinal cord/back injury
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse assesses clients at a community center. Which client is at greatest risk for lower back pain?
a. A 24-year-old female who is 25 weeks pregnant
b. A 36-year-old male who uses ergonomic techniques
c. A 45-year-old male with osteoarthritis
d. A 53-year-old female who uses a walker

ANS: C
Osteoarthritis causes changes to support structures, increasing the clients risk for low back pain. The other

clients are not at high risk.

DIF: Remembering/Knowledge REF: 889
KEY: Spinal cord/back injury| pain
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse teaches a client who is recovering from a spinal fusion. Which statement should the nurse include in this clients postoperative instructions?
a. Only lift items that are 10 pounds or less.
b. Wear your brace whenever you are out of bed.
c. You must remain in bed for 3 weeks after surgery.
d. You are prescribed medications to prevent rejection.

ANS: B
Clients who undergo spinal fusion are fitted with a brace that they must wear throughout the healing process (usually 3 to 6 months) whenever they are out of bed. The client should not lift anything. The client does not need to remain in bed. Medications for rejection prevention are not necessary for this procedure.

DIF: Applying/Application REF: 891
KEY: Back surgery| spinal cord/back injury
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse assesses a client who is recovering from anterior cervical diskectomy and fusion. Which complication should alert the nurse to urgently communicate with the health care provider?
a. Auscultated stridor
b. Weak pedal pulses
c. Difficulty swallowing
d. Inability to shrug shoulders

ANS: A
Postoperative swelling can narrow the trachea, cause a partial airway obstruction, and manifest as stridor. The client may also have trouble swallowing, but maintaining an airway takes priority. Weak pedal pulses and an inability to shrug the shoulders are not complications of this surgery.

DIF: Applying/Application REF: 899
KEY: Back surgery| spinal cord/back injury
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse assesses a client with a spinal cord injury at level T5. The clients blood pressure is 184/95 mm Hg, and the client presents with a flushed face and blurred vision. Which action should the nurse take first?
a. Initiate oxygen via a nasal cannula.
b. Place the client in a supine position.
c. Palpate the bladder for distention.
d. Administer a prescribed beta blocker.

ANS: C
The client is manifesting symptoms of autonomic dysreflexia. Common causes include bladder distention, tight clothing, increased room temperature, and fecal impaction. If persistent, the client could experience neurologic injury. Precipitating conditions should be eliminated and the physician notified. The other actions would not be appropriate.

DIF: Applying/Application REF: 902
KEY: Spinal cord/back injury
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. An emergency room nurse initiates care for a client with a cervical spinal cord injury who arrives via emergency medical services. Which action should the nurse take first?
a. Assess level of consciousness.
b. Obtain vital signs.
c. Administer oxygen therapy.
d. Evaluate respiratory status.

ANS: D
The first priority for a client with a spinal cord injury is assessment of respiratory status and airway patency. Clients with cervical spine injuries are particularly prone to respiratory compromise and may even require intubation. The other assessments should be performed after airway and breathing are assessed.

DIF: Applying/Application REF: 897
KEY: Spinal cord/back injury
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. An emergency department nurse cares for a client who experienced a spinal cord injury 1 hour ago. Which prescribed medication should the nurse prepare to administer?
a. Intrathecal baclofen (Lioresal)
b. Methylprednisolone (Medrol)
c. Atropine sulfate
d. Epinephrine (Adrenalin)

ANS: B
Methylprednisolone (Medrol) should be given within 8 hours of the injury. Clients who receive this therapy usually show improvement in motor and sensory function. The other medications are inappropriate for this client.

DIF: Applying/Application REF: 911
KEY: Medication safety| spinal cord/back injury| steroid
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A nurse teaches a client with a lower motor neuron lesion who wants to achieve bladder control. Which statement should the nurse include in this clients teaching?
a. Stroke the inner aspect of your thigh to initiate voiding.
b. Use a clean technique for intermittent catheterization.
c. Implement digital anal stimulation when your bladder is full.
d. Tighten your abdominal muscles to stimulate urine flow.

ANS: D
In clients with lower motor neuron problems such as spinal cord injury, performing a Valsalva maneuver or tightening the abdominal muscles are interventions that can initiate voiding. Stroking the inner aspect of the thigh may initiate voiding in a client who has an upper motor neuron problem. Intermittent catheterization and digital anal stimulation do not initiate voiding or bladder control.

DIF: Applying/Application REF: 903
KEY: Spinal cord/back injury| elimination| patient education
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

11. A nurse is caring for a client with paraplegia who is scheduled to participate in a rehabilitation program. The client states, I do not understand the need for rehabilitation; the paralysis will not go away and it will not get better. How should the nurse respond?
a. If you dont want to participate in the rehabilitation program, Ill let the provider know.
b. Rehabilitation programs have helped many clients with your injury. You should give it a chance.
c. The rehabilitation program will teach you how to maintain the functional ability you have and prevent further disability.

d. When new discoveries are made regarding paraplegia, people in rehabilitation programs will benefit first.

ANS: C
Participation in rehabilitation programs has many purposes, including prevention of disability, maintenance of functional ability, and restoration of function. The other responses do not meet this clients needs.

DIF: Applying/Application REF: 903
KEY: Spinal cord/back injury
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Psychosocial Integrity

12. After teaching a client with a spinal cord injury, the nurse assesses the clients understanding. Which client statement indicates a correct understanding of how to prevent respiratory problems at home?
a. Ill use my incentive spirometer every 2 hours while Im awake.
b. Ill drink thinned fluids to prevent choking.
c. Ill take cough medicine to prevent excessive coughing.
d. Ill position myself on my right side so I dont aspirate.

ANS: A
Often, the person with a spinal cord injury will have weak intercostal muscles and is at higher risk for developing atelectasis and stasis pneumonia. Using an incentive spirometer every 2 hours helps the client expand the lungs more fully and prevents atelectasis. Clients should drink fluids that they can tolerate; usually thick fluids are easier to tolerate. The client should be encouraged to cough and clear secretions. Clients should be placed in high-Fowlers position to prevent aspiration.

DIF: Applying/Application REF: 899
KEY: Spinal cord/back injury
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A nurse assesses a client with early-onset multiple sclerosis (MS). Which clinical manifestation should the nurse expect to find?
a. Hyperresponsive reflexes
b. Excessive somnolence
c. Nystagmus
d. Heat intolerance

ANS: C
Early signs and symptoms of MS include changes in motor skills, vision, and sensation. Hyperresponsive reflexes, excessive somnolence, and heat intolerance are later manifestations of MS.

DIF: Understanding/Comprehension REF: 908
KEY: Multiple sclerosis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

14. A nurse cares for a client who presents with an acute exacerbation of multiple sclerosis (MS). Which prescribed medication should the nurse prepare to administer?
a. Baclofen (Lioresal)
b. Interferon beta-1b (Betaseron)
c. Dantrolene sodium (Dantrium)
d. Methylprednisolone (Medrol)

ANS: D
Methylprednisolone is the drug of choice for acute exacerbations of the disease. The other drugs are not used to treat acute exacerbations of MS. Interferon beta-1b is used to treat and control MS, decrease specific symptoms, and slow the progression of the disease. Baclofen and dantrolene sodium are prescribed to lessen muscle spasticity associated with MS.

DIF: Applying/Application REF: 911
KEY: Multiple sclerosis| medication administration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. A nurse assesses a client with multiple sclerosis after administering prescribed fingolimod (Gilenya). For which adverse effect should the nurse monitor?
a. Peripheral edema
b. Black tarry stools
c. Bradycardia
d. Nausea and vomiting

ANS: C
Fingolimod (Gilenya) is an antineoplastic agent that can cause bradycardia, especially within the first 6 hours after administration. Peripheral edema, black and tarry stools, and nausea and vomiting are not adverse effects of fingolimod.

DIF: Applying/Application REF: 911
KEY: Multiple sclerosis| medication safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A nurse is teaching a client with multiple sclerosis who is prescribed cyclophosphamide (Cytoxan) and methylprednisolone (Medrol). Which statement should the nurse include in this clients discharge teaching?
a. Take warm baths to promote muscle relaxation.
b. Avoid crowds and people with colds.
c. Relying on a walker will weaken your gait.
d. Take prescribed medications when symptoms occur.

ANS: B
The client should be taught to avoid people with any type of upper respiratory illness because these medications are immunosuppressive. Warm baths will exacerbate the clients symptoms. Assistive devices may be required for safe ambulation. Medication should be taken at all times and should not be stopped.

DIF: Applying/Application REF: 911
KEY: Multiple sclerosis| medication safety| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

17. A nurse assesses a client with a neurologic disorder. Which assessment finding should the nurse identify as a late manifestation of amyotrophic lateral sclerosis (ALS)?
a. Dysarthria
b. Dysphagia
c. Muscle weakness
d. Impairment of respiratory muscles

ANS: D
In ALS, progressive muscle atrophy occurs until a flaccid quadriplegia develops. Eventually, the respiratory muscles are involved, which leads to respiratory compromise. Dysarthria, dysphagia, and muscle weakness are early clinical manifestations of ALS.

DIF: Understanding/Comprehension REF: 913
KEY: Amyotrophic lateral sclerosis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

18. A nurse cares for several clients on a neurologic unit. Which prescription for a client should direct the nurse to ensure that an informed consent has been obtained before the test or procedure?
a. Sensation measurement via the pinprick method

b. Computed tomography of the cranial vault
c. Lumbar puncture for cerebrospinal fluid sampling
d. Venipuncture for autoantibody analysis

ANS: C
A lumbar puncture is an invasive procedure with many potentially serious complications. The other assessments or tests are considered noninvasive and do not require an informed consent.

DIF: Applying/Application REF: 891
KEY: Assessment/diagnostic examination| informed consent
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nurse prepares a client for prescribed magnetic resonance imaging (MRI). Which action should the nurse implement prior to the test?
a. Implement nothing by mouth (NPO) status for 8 hours.
b. Withhold all daily medications until after the examination.
c. Administer morphine sulfate to prevent claustrophobia during the test.
d. Place the client in a gown that has cloth ties instead of metal snaps.

ANS: D
Metal objects are a hazard because of the magnetic field used in the MRI procedure. Morphine sulfate is not administered to prevent claustrophobia; lorazepam (Ativan) or diazepam (Valium) may be used instead. The client does not need to be NPO, and daily medications do not need to be withheld prior to MRI.

DIF: Applying/Application REF: 898
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

20. A nurse cares for a client with a spinal cord injury. With which interdisciplinary team member should the nurse consult to assist the client with activities of daily living?
a. Social worker
b. Physical therapist
c. Occupational therapist
d. Case manager

ANS: C
The occupational therapist instructs the client in the correct use of all adaptive equipment. In collaboration with the therapist, the nurse instructs family members or the caregiver about transfer skills, feeding, bathing, dressing, positioning, and skin care. The other team members are consulted to assist the client with unrelated issues.

DIF: Applying/Application REF: 904
KEY: Spinal cord/back injury| interdisciplinary team
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

21. A nurse cares for a client with amyotrophic lateral sclerosis (ALS). The client states, I do not want to be placed on a mechanical ventilator. How should the nurse respond?
a. You should discuss this with your family and health care provider.
b. Why are you afraid of being placed on a breathing machine?
c. Using the incentive spirometer each hour will delay the need for a ventilator.
d. What would you like to be done if you begin to have difficulty breathing?

ANS: D
ALS is an adult-onset upper and lower motor neuron disease characterized by progressive weakness, muscle wasting, and spasticity, eventually leading to paralysis. Once muscles of breathing are involved, the client must indicate in the advance directive what is to be done when breathing is no longer possible without intervention.

The other statements do not address the clients needs.

DIF: Applying/Application REF: 914
KEY: Amyotrophic lateral sclerosis| advocacy
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

22. A nurse assesses the health history of a client who is prescribed ziconotide (Prialt) for chronic back pain. Which assessment question should the nurse ask?
a. Are you taking a nonsteroidal anti-inflammatory drug?
b. Do you have a mental health disorder?
c. Are you able to swallow medications?
d. Do you smoke cigarettes or any illegal drugs?

ANS: B
Clients who have a mental health or behavioral health problem should not take ziconotide. The other questions do not identify a contraindication for this medication.

DIF: Applying/Application REF: 894
KEY: Spinal cord/back injury| medication safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A nurse assesses a client who recently experienced a traumatic spinal cord injury. Which assessment data should the nurse obtain to assess the clients coping strategies? (Select all that apply.)
a. Spiritual beliefs
b. Level of pain
c. Family support
d. Level of independence
e. Annual income
f. Previous coping strategies

ANS: A, C, D, F
Information about the clients preinjury psychosocial status, usual methods of coping with illness, difficult situations, and disappointments should be obtained. Determine the clients level of independence or dependence and his or her comfort level in discussing feelings and emotions with family members or close friends. Clients who are emotionally secure and have a positive self-image, a supportive family, and financial and job security often adapt to their injury. Information about the clients spiritual and religious beliefs or cultural background also assists the nurse in developing the plan of care. The other options do not supply as much information about coping.

DIF: Applying/Application REF: 897
KEY: Spinal cord/back injury| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

2. After teaching a client with a spinal cord tumor, the nurse assesses the clients understanding. Which statements by the client indicate a correct understanding of the teaching? (Select all that apply.)
a. Even though turning hurts, I will remind you to turn me every 2 hours.
b. Radiation therapy can shrink the tumor but also can cause more problems.
c. Surgery will be scheduled to remove the tumor and reverse my symptoms.
d. I put my affairs in order because this type of cancer is almost always fatal.
e. My family is moving my bedroom downstairs for when I am discharged home.

ANS: A, B, E
Although surgery may relieve symptoms by reducing pressure on the spine and debulking the tumor, some motor and sensory deficits may remain. Spinal tumors usually cause disability but are not usually fatal. Radiation therapy is often used to shrink spinal tumors but can cause progressive spinal cord degeneration and

neurologic deficits. The client should be turned every 2 hours to prevent skin breakdown and arrangements should be made at home so that the client can complete activities of daily living without needing to go up and down stairs.

DIF: Applying/Application REF: 906
KEY: Spinal cord/back injury| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. After teaching a male client with a spinal cord injury at the T4 level, the nurse assesses the clients understanding. Which client statements indicate a correct understanding of the teaching related to sexual effects of this injury? (Select all that apply.)
a. I will explore other ways besides intercourse to please my partner.
b. I will not be able to have an erection because of my injury.
c. Ejaculation may not be as predictable as before.
d. I may urinate with ejaculation but this will not cause infection.
e. I should be able to have an erection with stimulation.

ANS: C, D, E
Men with injuries above T6 often are able to have erections by stimulating reflex activity. For example, stroking the penis will cause an erection. Ejaculation is less predictable and may be mixed with urine. However, urine is sterile, so the clients partner will not get an infection.

DIF: Applying/Application REF: 904
KEY: Spinal cord/back injury| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse cares for a client with a lower motor neuron injury who is experiencing a flaccid bowel elimination pattern. Which actions should the nurse take to assist in relieving this clients constipation? (Select all that apply.)
a. Pour warm water over the perineum.
b. Provide a diet high in fluids and fiber.
c. Administer daily tap water enemas.
d. Implement a consistent daily time for elimination.
e. Massage the abdomen from left to right.
f. Perform manual disimpaction.

ANS: B, D, F
For the client with a lower motor neuron injury, the resulting flaccid bowel may require a bowel program for the client that includes stool softeners, increased fluid intake, a high-fiber diet, and a consistent elimination time. If the client becomes impacted, the nurse would need to perform manual disimpaction. Pouring warm water over the perineum, administering daily enemas, and massaging the abdomen would not assist this client.

DIF: Applying/Application REF: 903
KEY: Spinal cord/back injury| elimination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A nurse assesses a client who is recovering from a lumbar laminectomy. Which complications should alert the nurse to urgently communicate with the health care provider? (Select all that apply.)
a. Surgical discomfort
b. Redness and itching at the incision site
c. Incisional bulging
d. Clear drainage on the dressing
e. Sudden and severe headache

ANS: C, D, E
Bulging at the incision site or clear fluid on the dressing after a laminectomy strongly suggests a cerebrospinal

fluid leak, which constitutes an emergency. Loss of cerebral spinal fluid may cause a sudden and severe headache, which is also an emergency situation. Pain, redness, and itching at the site are normal.

DIF: Applying/Application REF: 892
KEY: Assessment/diagnostic examination
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse assesses a client with paraplegia from a spinal cord injury and notes reddened areas over the clients hips and sacrum. Which actions should the nurse take? (Select all that apply.)
a. Apply a barrier cream to protect the skin from excoriation.
b. Perform range-of-motion (ROM) exercises for the hip joint.
c. Re-position the client off of the reddened areas.
d. Get the client out of bed and into a chair once a day.
e. Obtain a low-air-loss mattress to minimize pressure.

ANS: C, E
Appropriate interventions to relieve pressure on these areas include frequent re-positioning and a low-air-loss mattress. Reddened areas should not be rubbed because this action could cause more extensive damage to the already fragile capillary system. Barrier cream will not protect the skin from pressure wounds. ROM exercises are used to prevent contractures. Sitting the client in a chair once a day will decrease the clients risk of respiratory complications but will not decrease pressure on the clients hips and sacrum.

DIF: Applying/Application REF: 901
KEY: Spinal cord/back injury| skin lesions/wounds
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A nurse assesses a client who experienced a spinal cord injury at the T5 level 12 hours ago. Which manifestations should the nurse correlate with neurogenic shock? (Select all that apply.)
a. Heart rate of 34 beats/min
b. Blood pressure of 185/65 mm Hg
c. Urine output less than 30 mL/hr
d. Decreased level of consciousness
e. Increased oxygen saturation

ANS: A, C, D
Neurogenic shock with acute spinal cord injury manifests with decreased oxygen saturation, symptomatic bradycardia, decreased level of consciousness, decreased urine output, and hypotension.

DIF: Applying/Application REF: 899
KEY: Spinal cord/back injury| shock
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. A nurse plans care for a client with a halo fixator. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Tape a halo wrench to the clients vest.
b. Assess the pin sites for signs of infection.
c. Loosen the pins when sleeping.
d. Decrease the clients oral fluid intake.
e. Assess the chest and back for skin breakdown.

ANS: A, B, E
A special halo wrench should be taped to the clients vest in case of a cardiopulmonary emergency. The nurse should assess the pin sites for signs of infection or loose pins and for complications from the halo. The nurse should also increase fluids and fiber to decrease bowel straining and assess the clients chest and back for skin breakdown from the halo vest.

DIF: Applying/Application REF: 900
KEY: Spinal cord/back injury
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 44: Care of Patients with Problems of the Peripheral Nervous System

MULTIPLE CHOICE

1. A client is admitted with Guillain-Barr syndrome (GBS). What assessment takes priority?
a. Bladder control
b. Cognitive perception
c. Respiratory system
d. Sensory functions

ANS: C
Clients with GBS have muscle weakness, possibly to the point of paralysis. If respiratory muscles are paralyzed, the client may need mechanical ventilation, so the respiratory system is the priority. The nurse will complete urinary, cognitive, and sensory assessments as part of a thorough evaluation.

DIF: Applying/Application REF: 914
KEY: Peripheral nervous system| respiratory assessment| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. The nurse learns that the pathophysiology of Guillain-Barr syndrome includes segmental demyelination. The nurse should understand that this causes what?
a. Delayed afferent nerve impulses
b. Paralysis of affected muscles
c. Paresthesia in upper extremities
d. Slowed nerve impulse transmission

ANS: D
Demyelination leads to slowed nerve impulse transmission. The other options are not correct.

DIF: Remembering/Knowledge REF: 913
KEY: Peripheral nervous system MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A client with Guillain-Barr syndrome is admitted to the hospital. The nurse plans caregiving priority to interventions that address which priority client problem?
a. Anxiety
b. Low fluid volume
c. Inadequate airway
d. Potential for skin breakdown

ANS: C
Airway takes priority. Anxiety is probably present, but a physical diagnosis takes priority over a psychosocial one. The client has no reason to have low fluid volume unless he or she has been unable to drink for some time If present, airway problems take priority over a circulation problem. An actual problem takes precedence over a risk for a problem.

DIF: Analyzing/Analysis REF: 913
KEY: Peripheral nervous system| respiratory system
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. The nurse is preparing a client for a Tensilon (edrophonium chloride) test. What action by the nurse is most important?
a. Administering anxiolytics
b. Having a ventilator nearby
c. Obtaining atropine sulfate

d. Sedating the client

ANS: C
Atropine is the antidote to edrophonium chloride and should be readily available when a client is having a Tensilon test. The nurse would not want to give medications that might cause increased weakness or sedation. A ventilator is not necessary to have nearby, although emergency equipment should be available.

DIF: Applying/Application REF: 918
KEY: Peripheral nervous system| medication adverse effects| diagnostic testing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A client is taking long-term corticosteroids for myasthenia gravis. What teaching is most important?
a. Avoid large crowds and people who are ill.
b. Check blood sugars four times a day.
c. Use two forms of contraception.
d. Wear properly fitting socks and shoes.

ANS: A
Corticosteroids reduce immune function, so clients taking these medications must avoid being exposed to illness. Long-term use can lead to secondary diabetes, but the client would not need to start checking blood glucose unless diabetes had been detected. Corticosteroids do not affect the effectiveness of contraception. Wearing well-fitting shoes would be important to avoid injury, but not just because the client takes corticosteroids.

DIF: Applying/Application REF: 919
KEY: Peripheral nervous system| corticosteroids| patient education| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A client with myasthenia gravis has the priority client problem of inadequate nutrition. What assessment finding indicates that the priority goal for this client problem has been met?
a. Ability to chew and swallow without aspiration
b. Eating 75% of meals and between-meal snacks
c. Intake greater than output 3 days in a row
d. Weight gain of 3 pounds in 1 month

ANS: D
Weight gain is the best indicator that the client is receiving enough nutrition. Being able to chew and swallow is important for eating, but adequate nutrition can be accomplished through enteral means if needed. Swallowing without difficulty indicates an intact airway. Since the question does not indicate what the clients meals and snacks consist of, eating 75% may or may not be adequate. Intake and output refers to fluid balance.

DIF: Evaluating/Synthesis REF: 920
KEY: Peripheral nervous system| nutrition| nursing evaluation
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A client had a nerve laceration repair to the forearm and is being discharged in a cast. What statement by the client indicates a poor understanding of discharge instructions relating to cast care?
a. I can scratch with a coat hanger.
b. I should feel my fingers for warmth.
c. I will keep the cast clean and dry.
d. I will return to have the cast removed.

ANS: A
Nothing should be placed under the cast to use for scratching. The other statements show good indication that the client has understood the discharge instructions.

DIF: Evaluating/Synthesis REF: 924
KEY: Peripheral nervous system| patient education| perfusion
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. A client in the family practice clinic has restless leg syndrome. Routine laboratory work reveals white blood cells 8000/mm3, magnesium 0.8 mEq/L, and sodium 138 mEq/L. What action by the nurse is best?
a. Advise the client to restrict fluids.
b. Assess the client for signs of infection.
c. Have the client add table salt to food.
d. Instruct the client on a magnesium supplement.

ANS: D
Iron and magnesium deficiencies can sometimes exacerbate or increase symptoms of restless leg syndrome. The clients magnesium level is low, and the client should be advised to add a magnesium supplement. The other actions are not needed.

DIF: Applying/Application REF: 924
KEY: Peripheral nervous system| fluid and electrolyte imbalances| patient education| laboratory values MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A client has undergone a percutaneous stereotactic rhizotomy. What instruction by the nurse is most important on discharge from the ambulatory surgical center?
a. Avoid having teeth pulled for 1 year.
b. Brush your teeth with a soft toothbrush.
c. Do not use harsh chemicals on your face.
d. Inform your dentist of this procedure.

ANS: C
The affected side is left without sensation after this procedure. The client should avoid putting harsh chemicals on the face because he or she will not feel burning or stinging on that side. This will help avoid injury. The other instructions are not necessary.

DIF: Understanding/Comprehension REF: 926
KEY: Peripheral nervous system| pain| patient education| injury prevention
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A client has trigeminal neuralgia and has begun skipping meals and not brushing his teeth, and his family believes he has become depressed. What action by the nurse is best?
a. Ask the client to explain his feelings related to this disorder.
b. Explain how dental hygiene is related to overall health.
c. Refer the client to a medical social worker for assessment.
d. Tell the client that he will become malnourished in time.

ANS: A
Clients with trigeminal neuralgia are often afraid of causing pain, so they may limit eating, talking, dental hygiene, and socializing. The nurse first assesses the client for feelings related to having the disorder to determine if a psychosocial link is involved. The other options may be needed depending on the outcome of the initial assessment.

DIF: Applying/Application REF: 926
KEY: Peripheral nervous system| psychosocial response| coping| nursing assessment
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

11. A client is receiving plasmapheresis. What action by the nurse best prevents infection in this client?
a. Giving antibiotics prior to treatments

b. Monitoring the clients vital signs
c. Performing appropriate hand hygiene
d. Placing the client in protective isolation

ANS: C
Plasmapheresis is an invasive procedure, and the nurse uses good hand hygiene before and after client contact to prevent infection. Antibiotics are not necessary. Monitoring vital signs does not prevent infection but could alert the nurse to its possibility. The client does not need isolation.

DIF: Applying/Application REF: 914
KEY: Peripheral nervous system| infection control| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. An older client is hospitalized with Guillain-Barr syndrome. A family member tells the nurse the client is restless and seems confused. What action by the nurse is best?
a. Assess the clients oxygen saturation.
b. Check the medication list for interactions.
c. Place the client on a bed alarm.
d. Put the client on safety precautions.

ANS: A
In the older adult, an early sign of hypoxia is often confusion and restlessness. The nurse should first assess the clients oxygen saturation. The other actions are appropriate, but only after this assessment occurs.

DIF: Applying/Application REF: 915
KEY: Peripheral nervous system| respiratory system| respiratory assessment| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

13. A client with myasthenia gravis (MG) asks the nurse to explain the disease. What response by the nurse is best?
a. MG is an autoimmune problem in which nerves do not cause muscles to contract.
b. MG is an inherited destruction of peripheral nerve endings and junctions.
c. MG consists of trauma-induced paralysis of specific cranial nerves.
d. MG is a viral infection of the dorsal root of sensory nerve fibers.

ANS: A
MG is an autoimmune disorder in which nerve fibers are damaged and their impulses do not lead to muscle contraction. MG is not an inherited or viral disorder and does not paralyze specific cranial nerves.

DIF: Understanding/Comprehension REF: 916
KEY: Peripheral nervous system| peripheral nervous system disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. A client with myasthenia gravis is prescribed pyridostigmine (Mestinon). What teaching should the nurse plan regarding this medication? (Select all that apply.)
a. Do not eat a full meal for 45 minutes after taking the drug.
b. Seek immediate care if you develop trouble swallowing.
c. Take this drug on an empty stomach for best absorption.
d. The dose may change frequently depending on symptoms.
e. Your urine may turn a reddish-orange color while on this drug.

ANS: A, B, D
Pyridostigmine should be given with a small amount of food to prevent GI upset, but the client should wait to eat a full meal due to the potential for aspiration. If difficulty with swallowing occurs, the client should seek

immediate attention. The dose can change on a day-to-day basis depending on the clients manifestations. Taking the drug on an empty stomach is not related although the client needs to eat within 45 to 60 minutes afterwards. The clients urine will not turn reddish-orange while on this drug.

DIF: Understanding/Comprehension REF: 919
KEY: Peripheral nervous system| anti-cholinesterase drugs| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A client has been diagnosed with Bells palsy. About what drugs should the nurse anticipate possibly teaching the client? (Select all that apply.)
a. Acyclovir (Zovirax)
b. Carbamazepine (Tegretol)
c. Famciclovir (Famvir)
d. Prednisone (Deltasone)
e. Valacyclovir (Valtrex)

ANS: A, C, D, E
Possible pharmacologic treatment for Bells palsy includes acyclovir, famciclovir, prednisone, and valacyclovir. Carbamazepine is an anticonvulsant and mood-stabilizing drug and is not used for Bells palsy.

DIF: Remembering/Knowledge REF: 926
KEY: Peripheral nervous system| medication administration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A client with myasthenia gravis is malnourished. What actions to improve nutrition may the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Assessing the clients gag reflex
b. Cutting foods up into small bites
c. Monitoring prealbumin levels
d. Thickening liquids prior to drinking
e. Weighing the client daily

ANS: B, D
Cutting food up into smaller bites makes it easier for the client to chew and swallow. Thickened liquids help prevent aspiration. The UAP can weigh the client, but this does not help improve nutrition. The nurse assesses the gag reflex and monitors laboratory values.

DIF: Applying/Application REF: 920
KEY: Peripheral nervous system| nutrition| delegation| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. An older adult client is hospitalized with Guillain-Barr syndrome. The client is given amitriptyline (Elavil). After receiving the hand-off report, what actions by the nurse are most important? (Select all that apply.)
a. Administering the medication as ordered
b. Advising the client to have help getting up
c. Consulting the provider about the drug
d. Cutting the dose of the drug in half
e. Placing the client on safety precautions

ANS: B, C, E
Amitriptyline is a tricyclic antidepressant and is considered inappropriate for use in older clients due to concerns of anticholinergic effects, confusion, and safety risks. The nurse should tell the client to have help getting up, place the client on safety precautions, and consult the provider. Since this drug is not appropriate for older clients, cutting the dose in half is not warranted.

DIF: Applying/Application REF: 915

KEY: Peripheral nervous system| tricyclic antidepressants| older adult| injury prevention| patient safety MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. The nurse caring for a client with Guillain-Barr syndrome has identified the priority client problem of decreased mobility for the client. What actions by the nurse are best? (Select all that apply.)
a. Ask occupational therapy to help the client with activities of daily living.
b. Consult with the provider about a physical therapy consult.
c. Provide the client with information on support groups.
d. Refer the client to a medical social worker or chaplain.
e. Work with speech therapy to design a high-protein diet.

ANS: A, B, E
Improving mobility and strength involves the collaborative assistance of occupational therapy, physical therapy, and speech therapy. While support groups, social work, or chaplain referrals may be needed, they do not help with mobility.

DIF: Applying/Application REF: 915
KEY: Peripheral nervous system| mobility| collaboration| communication| referrals
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 45: Care of Critically Ill Patients with Neurologic Problems

MULTIPLE CHOICE

1. A client is in the emergency department reporting a brief episode during which he was dizzy, unable to speak, and felt like his legs were very heavy. Currently the clients neurologic examination is normal. About what drug should the nurse plan to teach the client?
a. Alteplase (Activase)
b. Clopidogrel (Plavix)
c. Heparin sodium
d. Mannitol (Osmitrol)

ANS: B
This clients manifestations are consistent with a transient ischemic attack, and the client would be prescribed aspirin or clopidogrel on discharge. Alteplase is used for ischemic stroke. Heparin and mannitol are not used for this condition.

DIF: Remembering/Knowledge REF: 927
KEY: Neurologic disorders| antiplatelet medications| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A client had an embolic stroke and is having an echocardiogram. When the client asks why the provider ordered a test on my heart, how should the nurse respond?
a. Most of these types of blood clots come from the heart.
b. Some of the blood clots may have gone to your heart too.
c. We need to see if your heart is strong enough for therapy.
d. Your heart may have been damaged in the stroke too.

ANS: A
An embolic stroke is caused when blood clots travel from one area of the body to the brain. The most common source of the clots is the heart. The other statements are inaccurate.

DIF: Understanding/Comprehension REF: 928
KEY: Neurologic disorders| stroke| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse receives a report on a client who had a left-sided stroke and has homonymous hemianopsia. What action by the nurse is most appropriate for this client?
a. Assess for bladder retention and/or incontinence.
b. Listen to the clients lungs after eating or drinking.
c. Prop the clients right side up when sitting in a chair.
d. Rotate the clients meal tray when the client stops eating.

ANS: D
This condition is blindness on the same side of both eyes. The client must turn his or her head to see the entire visual field. The client may not see all the food on the tray, so the nurse rotates it so uneaten food is now withir the visual field. This condition is not related to bladder function, difficulty swallowing, or lack of trunk control.

DIF: Applying/Application REF: 933
KEY: Neurologic disorders| stroke| visual disorders
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A client with a stroke is being evaluated for fibrinolytic therapy. What information from the client or family is most important for the nurse to obtain?
a. Loss of bladder control

b. Other medical conditions
c. Progression of symptoms
d. Time of symptom onset

ANS: D
The time limit for initiating fibrinolytic therapy for a stroke is 3 to 4.5 hours, so the exact time of symptom onset is the most important information for this client. The other information is not as critical.

DIF: Applying/Application REF: 935
KEY: Stroke| neurologic disorders| nursing assessment| fibrinolytic therapy
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A client is being prepared for a mechanical embolectomy. What action by the nurse takes priority?
a. Assess for contraindications to fibrinolytics.
b. Ensure that informed consent is on the chart.
c. Perform a full neurologic assessment.
d. Review the clients medication lists.

ANS: B
For this invasive procedure, the client needs to give informed consent. The nurse ensures that this is on the chart prior to the procedure beginning. Fibrinolytics are not used. A neurologic assessment and medication review are important, but the consent is the priority.

DIF: Applying/Application REF: 935
KEY: Neurologic disorders| stroke| informed consent
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A client had an embolectomy for an arteriovenous malformation (AVM). The client is now reporting a severe headache and has vomited. What action by the nurse takes priority?
a. Administer pain medication.
b. Assess the clients vital signs.
c. Notify the Rapid Response Team.
d. Raise the head of the bed.

ANS: C
This client may be experiencing a rebleed from the AVM. The most important action is to call the Rapid Response Team as this is an emergency. The nurse can assess vital signs while someone else notifies the Team, but getting immediate medical attention is the priority. Administering pain medication may not be warranted if the client must return to surgery. The optimal position for the client with an AVM has not been determined, but calling the Rapid Response Team takes priority over positioning.

DIF: Applying/Application REF: 938
KEY: Neurologic disorders| critical rescue| Rapid Response Team| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A student nurse is preparing morning medications for a client who had a stroke. The student plans to hold the docusate sodium (Colace) because the client had a large stool earlier. What action by the supervising nurse is best?
a. Have the student ask the client if it is desired or not.
b. Inform the student that the docusate should be given.
c. Tell the student to document the rationale.
d. Tell the student to give it unless the client refuses.

ANS: B
Stool softeners should be given to clients with neurologic disorders in order to prevent an elevation in intracranial pressure that accompanies the Valsalva maneuver when constipated. The supervising nurse should

instruct the student to administer the docusate. The other options are not appropriate. The medication could be held for diarrhea.

DIF: Applying/Application REF: 939
KEY: Neurologic disorders| stool softeners| constipation| intracranial pressure
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A client experiences impaired swallowing after a stroke and has worked with speech-language pathology on eating. What nursing assessment best indicates that a priority goal for this problem has been met?
a. Chooses preferred items from the menu
b. Eats 75% to 100% of all meals and snacks
c. Has clear lung sounds on auscultation
d. Gains 2 pounds after 1 week

ANS: C
Impaired swallowing can lead to aspiration, so the priority goal for this problem is no aspiration. Clear lung sounds is the best indicator that aspiration has not occurred. Choosing menu items is not related to this problem. Eating meals does not indicate the client is not still aspirating. A weight gain indicates improved nutrition but still does not show a lack of aspiration.

DIF: Evaluating/Synthesis REF: 939
KEY: Neurologic disorders| stroke| aspiration
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A client with a stroke has damage to Brocas area. What intervention to promote communication is best for this client?
a. Assess whether or not the client can write.
b. Communicate using yes-or-no questions.
c. Reinforce speech therapy exercises.
d. Remind the client not to use neologisms.

ANS: A
Damage to Brocas area often leads to expressive aphasia, wherein the client can understand what is said but cannot express thoughts verbally. In some instances the client can write. The nurse should assess to see if that ability is intact. Yes-or-no questions are not good for this type of client because he or she will often answer automatically but incorrectly. Reinforcing speech therapy exercises is good for all clients with communication difficulties. Neologisms are made-up words often used by clients with sensory aphasia.

DIF: Applying/Application REF: 940
KEY: Neurologic disorders| stroke| communication
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Psychosocial Integrity

10. A clients mean arterial pressure is 60 mm Hg and intracranial pressure is 20 mm Hg. Based on the clients cerebral perfusion pressure, what should the nurse anticipate for this client?
a. Impending brain herniation
b. Poor prognosis and cognitive function
c. Probable complete recovery
d. Unable to tell from this information

ANS: B
The cerebral perfusion pressure (CPP) is the intracranial pressure subtracted from the mean arterial pressure: in this case, 60 20 = 40. For optimal outcomes, CPP should be at least 70 mm Hg. This client has very low CPP, which will probably lead to a poorer prognosis with significant cognitive dysfunction should the client survive. This data does not indicate impending brain herniation or complete recovery.

DIF: Analyzing/Analysis REF: 946

KEY: Neurologic disorders| nursing assessment| neurologic assessment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A client has a traumatic brain injury. The nurse assesses the following: pulse change from 82 to 60 beats/min, pulse pressure increase from 26 to 40 mm Hg, and respiratory irregularities. What action by the nurse takes priority?
a. Call the provider or Rapid Response Team.
b. Increase the rate of the IV fluid administration.
c. Notify respiratory therapy for a breathing treatment.
d. Prepare to give IV pain medication.

ANS: A
These manifestations indicate Cushings syndrome, a potentially life-threatening increase in intracranial pressure (ICP), which is an emergency. Immediate medical attention is necessary, so the nurse notifies the provider or the Rapid Response Team. Increasing fluids would increase the ICP. The client does not need a breathing treatment or pain medication.

DIF: Applying/Application REF: 949
KEY: Neurologic disorders| Rapid Response Team| critical rescue
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12. A nurse is caring for four clients in the neurologic intensive care unit. After receiving the hand-off report, which client should the nurse see first?
a. Client with a Glasgow Coma Scale score that was 10 and is now is 8
b. Client with a Glasgow Coma Scale score that was 9 and is now is 12
c. Client with a moderate brain injury who is amnesic for the event
d. Client who is requesting pain medication for a headache

ANS: A
A 2-point decrease in the Glasgow Coma Scale score is clinically significant and the nurse needs to see this client first. An improvement in the score is a good sign. Amnesia is an expected finding with brain injuries, so this client is lower priority. The client requesting pain medication should be seen after the one with the declining Glasgow Coma Scale score.

DIF: Applying/Application REF: 949
KEY: Neurologic disorders| neurologic assessment| critical rescue
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A client is in the clinic for a follow-up visit after a moderate traumatic brain injury. The clients spouse is very frustrated, stating that the clients personality has changed and the situation is intolerable. What action by the nurse is best?
a. Explain that personality changes are common following brain injuries.
b. Ask the client why he or she is acting out and behaving differently.
c. Refer the client and spouse to a head injury support group.
d. Tell the spouse this is expected and he or she will have to learn to cope.

ANS: A
Personality and behavior often change permanently after head injury. The nurse should explain this to the spouse. Asking the client about his or her behavior isnt useful because the client probably cannot help it. A referral might be a good idea, but the nurse needs to do something in addition to just referring the couple. Telling the spouse to learn to cope belittles the spouses concerns and feelings.

DIF: Applying/Application REF: 950
KEY: Neurologic disorders| therapeutic communication| psychosocial response| coping
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

14. The nurse is caring for four clients with traumatic brain injuries. Which client should the nurse assess first?
a. Client with cerebral perfusion pressure of 72 mm Hg
b. Client who has a Glasgow Coma Scale score of 12
c. Client with a $PaCO_2$ of 36 mm Hg who is on a ventilator
d. Client who has a temperature of 102 F (38.9 C)

ANS: D
A fever is a poor prognostic indicator in clients with brain injuries. The nurse should see this client first. A Glasgow Coma Scale score of 12, a $PaCO_2$ of 36, and cerebral perfusion pressure of 72 mm Hg are all desired outcomes.

DIF: Applying/Application REF: 950
KEY: Neurologic disorders| neurologic assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse is caring for four clients who might be brain dead. Which client would best meet the criteria to allow assessment of brain death?
a. Client with a core temperature of 95 F (35 C) for 2 days
b. Client in a coma for 2 weeks from a motor vehicle crash
c. Client who is found unresponsive in a remote area of a field by a hunter
d. Client with a systolic blood pressure of 92 mm Hg since admission

ANS: B
In order to determine brain death, clients must meet four criteria: 1) coma from a known cause, 2) normal or near-normal core temperature, 3) normal systolic blood pressure, and 4) at least one neurologic examination. The client who was in the car crash meets two of these criteria. The clients with the lower temperature and lower blood pressure have only one of these criteria. There is no data to support assessment of brain death in the client found by the hunter.

DIF: Remembering/Knowledge REF: 951
KEY: Neurologic disorders| brain death| neurologic assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

16. A client with a traumatic brain injury is agitated and fighting the ventilator. What drug should the nurse prepare to administer?
a. Carbamazepine (Tegretol)
b. Dexmedetomidine (Precedex)
c. Diazepam (Valium)
d. Mannitol (Osmitrol)

ANS: B
Dexmedetomidine is often used to manage agitation in the client with traumatic brain injury. Carbamazepine is an antiseizure drug. Diazepam is a benzodiazepine. Mannitol is an osmotic diuretic.

DIF: Remembering/Knowledge REF: 952
KEY: Neurologic disorders| sedatives| mechanical ventilation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

17. A client who had a severe traumatic brain injury is being discharged home, where the spouse will be a full-time caregiver. What statement by the spouse would lead the nurse to provide further education on home care?
a. I know I can take care of all these needs by myself.
b. I need to seek counseling because I am very angry.
c. Hopefully things will improve gradually over time.
d. With respite care and support, I think I can do this.

ANS: A

This caregiver has unrealistic expectations about being able to do everything without help. Acknowledging anger and seeking counseling show a realistic outlook and plans for accomplishing goals. Hoping for improvement over time is also realistic, especially with the inclusion of the word hopefully. Realizing the importance of respite care and support also is a realistic outlook.

DIF: Evaluating/Synthesis REF: 954
KEY: Neurologic disorders| discharge teaching| psychosocial response| coping
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

18. A client in the intensive care unit is scheduled for a lumbar puncture (LP) today. On assessment, the nurse finds the client breathing irregularly with one pupil fixed and dilated. What action by the nurse is best?
a. Ensure that informed consent is on the chart.
b. Document these findings in the clients record.
c. Give the prescribed preprocedure sedation.
d. Notify the provider of the findings immediately.

ANS: D
This client is exhibiting signs of increased intracranial pressure. The nurse should notify the provider immediately because performing the LP now could lead to herniation. Informed consent is needed for an LP, but this is not the priority. Documentation should be thorough, but again this is not the priority. The preprocedure sedation (or other preprocedure medications) should not be given as the LP will most likely be canceled.

DIF: Applying/Application REF: 949
KEY: Neurologic disorders| neurologic assessment| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

19. After a craniotomy, the nurse assesses the client and finds dry, sticky mucous membranes and restlessness. The client has IV fluids running at 75 mL/hr. What action by the nurse is best?
a. Assess the clients magnesium level.
b. Assess the clients sodium level.
c. Increase the rate of the IV infusion.
d. Provide oral care every hour.

ANS: B
This client has manifestations of hypernatremia, which is a possible complication after craniotomy. The nurse should assess the clients serum sodium level. Magnesium level is not related. The nurse does not independently increase the rate of the IV infusion. Providing oral care is also a good option but does not take priority over assessing laboratory results.

DIF: Applying/Application REF: 958
KEY: Neurologic disorders| fluid and electrolyte imbalances| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

20. A nurse assesses a client with the National Institutes of Health (NIH) Stroke Scale and determines the clients score to be 36. How should the nurse plan care for this client?
a. The client will need near-total care.
b. The client will need cuing only.
c. The client will need safety precautions.
d. The client will be discharged home.

ANS: A
This client has severe neurologic deficits and will need near-total care. Safety precautions are important but do not give a full picture of the clients dependence. The client will need more than cuing to complete tasks. A home discharge may be possible, but this does not help the nurse plan care for a very dependent client.

DIF: Analyzing/Analysis REF: 932
KEY: Neurologic disorders| neurologic assessment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

21. A client has a brain abscess and is receiving phenytoin (Dilantin). The spouse questions the use of the drug, saying the client does not have a seizure disorder. What response by the nurse is best?
a. Increased pressure from the abscess can cause seizures.
b. Preventing febrile seizures with an abscess is important.
c. Seizures always occur in clients with brain abscesses.
d. This drug is used to sedate the client with an abscess.

ANS: A
Brain abscesses can lead to seizures as a complication. The nurse should explain this to the spouse. Phenytoin is not used to prevent febrile seizures. Seizures are possible but do not always occur in clients with brain abscesses. This drug is not used for sedation.

DIF: Understanding/Comprehension REF: 952
KEY: Neurologic disorders| antiseizure medications
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

22. A client has an intraventricular catheter. What action by the nurse takes priority?
a. Document intracranial pressure readings.
b. Perform hand hygiene before client care.
c. Measure intracranial pressure per hospital policy.
d. Teach the client and family about the device.

ANS: B
All of the actions are appropriate for this client. However, performing hand hygiene takes priority because it prevents infection, which is a possibly devastating complication.

DIF: Applying/Application REF: 958
KEY: Neurologic disorders| Standard Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

23. A client has a subarachnoid bolt. What action by the nurse is most important?
a. Balancing and recalibrating the device
b. Documenting intracranial pressure readings
c. Handling the fiberoptic cable with care to avoid breakage
d. Monitoring the clients phlebostatic axis

ANS: A
This device needs frequent balancing and recalibration in order to read correctly. Documenting readings is important, but it is more important to ensure the devices accuracy. The fiberoptic transducer-tipped catheter has a cable that must be handled carefully to avoid breaking it, but ensuring the devices accuracy is most important. The phlebostatic axis is not related to neurologic monitoring.

DIF: Applying/Application REF: 953
KEY: Neurologic disorders| neurologic assessment| equipment safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

24. A nurse is providing community screening for risk factors associated with stroke. Which client would the nurse identify as being at highest risk for a stroke?
a. A 27-year-old heavy cocaine user
b. A 30-year-old who drinks a beer a day
c. A 40-year-old who uses seasonal antihistamines

d. A 65-year-old who is active and on no medications

ANS: A
Heavy drug use, particularly cocaine, is a risk factor for stroke. Heavy alcohol use is also a risk factor, but one beer a day is not considered heavy drinking. Antihistamines may contain phenylpropanolamine, which also increases the risk for stroke, but this client uses them seasonally and there is no information that they are abused or used heavily. The 65-year-old has only age as a risk factor.

DIF: Remembering/Knowledge REF: 930
KEY: Neurologic disorders| stroke| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

25. A client has a shoulder injury and is scheduled for a magnetic resonance imaging (MRI). The nurse notes the presence of an aneurysm clip in the clients record. What action by the nurse is best?
a. Ask the client how long ago the clip was placed.
b. Have the client sign an informed consent form.
c. Inform the provider about the aneurysm clip.
d. Reschedule the client for computed tomography.

ANS: A
Some older clips are metal, which would preclude the use of MRI. The nurse should determine how old the clip is and relay that information to the MRI staff. They can determine if the client is a suitable candidate for this examination. The client does not need to sign informed consent. The provider will most likely not know if the client can have an MRI with this clip. The nurse does not independently change the type of diagnostic testing the client receives.

DIF: Applying/Application REF: 937
KEY: Neurologic disorders| patient safety| communication| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

26. A nurse is caring for four clients in the neurologic/neurosurgical intensive care unit. Which client should the nurse assess first?
a. Client who has been diagnosed with meningitis with a fever of 101 F (38.3 C)
b. Client who had a transient ischemic attack and is waiting for teaching on clopidogrel (Plavix)
c. Client receiving tissue plasminogen activator (t-PA) who has a change in respiratory pattern and rate
d. Client who is waiting for subarachnoid bolt insertion with the consent form already signed

ANS: C
The client receiving t-PA has a change in neurologic status while receiving this fibrinolytic therapy. The nurse assesses this client first as he or she may have an intracerebral bleed. The client with meningitis has expected manifestations. The client waiting for discharge teaching is a lower priority. The client waiting for surgery can be assessed quickly after the nurse sees the client who is receiving t-PA, or the nurse could delegate checking on this client to another nurse.

DIF: Analyzing/Analysis REF: 935
KEY: Neurologic disorders| critical rescue| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

27. The nurse assesses a clients Glasgow Coma Scale (GCS) score and determines it to be 12 (a 4 in each category). What care should the nurse anticipate for this client?
a. Can ambulate independently
b. May have trouble swallowing
c. Needs frequent re-orientation
d. Will need near-total care

ANS: C

This client will most likely be confused and need frequent re-orientation. The client may not be able to ambulate at all but should do so independently, not because of mental status. Swallowing is not assessed with the GCS. The client will not need near-total care.

DIF: Analyzing/Analysis REF: 931
KEY: Neurologic disorders| neurologic assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

28. After a stroke, a client has ataxia. What intervention is most appropriate to include on the clients plan of care?
a. Ambulate only with a gait belt.
b. Encourage double swallowing.
c. Monitor lung sounds after eating.
d. Perform post-void residuals.

ANS: A
Ataxia is a gait disturbance. For the clients safety, he or she should have assistance and use a gait belt when ambulating. Ataxia is not related to swallowing, aspiration, or voiding.

DIF: Applying/Application REF: 931
KEY: Neurologic disorders| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

29. A client in the emergency department is having a stroke and needs a carotid artery angioplasty with stenting. The clients mental status is deteriorating. What action by the nurse is most appropriate?
a. Attempt to find the family to sign a consent.
b. Inform the provider that the procedure cannot occur.
c. Nothing; no consent is needed in an emergency.
d. Sign the consent form for the client.

ANS: A
The nurse should attempt to find the family to give consent. If no family is present or can be found, under the principle of emergency consent, a life-saving procedure can be performed without formal consent. The nurse should not just sign the consent form.

DIF: Applying/Application REF: 935
KEY: Neurologic disorders| informed consent| ethics
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

30. A client has a traumatic brain injury and a positive halo sign. The client is in the intensive care unit, sedated and on a ventilator, and is in critical but stable condition. What collaborative problem takes priority at this time?
a. Inability to communicate
b. Nutritional deficit
c. Risk for acquiring an infection
d. Risk for skin breakdown

ANS: C
The positive halo sign indicates a leak of cerebrospinal fluid. This places the client at high risk of acquiring an infection. Communication and nutrition are not priorities compared with preventing a brain infection. The client has a definite risk for a skin breakdown, but it is not the immediate danger a brain infection would be.

DIF: Applying/Application REF: 949
KEY: Neurologic disorders| infection control| asepsis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nursing student studying the neurologic system learns which information? (Select all that apply.)
a. An aneurysm is a ballooning in a weakened part of an arterial wall.
b. An arteriovenous malformation is the usual cause of strokes.
c. Intracerebral hemorrhage is bleeding directly into the brain.
d. Reduced perfusion from vasospasm often makes stroke worse.
e. Subarachnoid hemorrhage is caused by high blood pressure.

ANS: A, C, D
An aneurysm is a ballooning of the weakened part of an arterial wall. Intracerebral hemorrhage is bleeding directly into the brain. Vasospasm often makes the damage from the initial stroke worse because it causes decreased perfusion. An arteriovenous malformation (AVM) is unusual. Subarachnoid hemorrhage is usually caused by a ruptured aneurysm or AVM.

DIF: Remembering/Knowledge REF: 929
KEY: Neurologic disorders MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. The nurse working in the emergency department assesses a client who has symptoms of stroke. For what modifiable risk factors should the nurse assess? (Select all that apply.)
a. Alcohol intake
b. Diabetes
c. High-fat diet
d. Obesity
e. Smoking

ANS: A, C, D, E
Alcohol intake, a high-fat diet, obesity, and smoking are all modifiable risk factors for stroke. Diabetes is not modifiable but is a risk factor that can be controlled with medical intervention.

DIF: Remembering/Knowledge REF: 930
KEY: Neurologic disorders| stroke| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is caring for a client after a stroke. What actions may the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Assess neurologic status with the Glasgow Coma Scale.
b. Check and document oxygen saturation every 1 to 2 hours.
c. Cluster client care to allow periods of uninterrupted rest.
d. Elevate the head of the bed to 45 degrees to prevent aspiration.
e. Position the client supine with the head in a neutral midline position.

ANS: B, E
The UAP can take and document vital signs, including oxygen saturation, and keep the clients head in a neutral, midline position with correct direction from the nurse. The nurse assesses the Glasgow Coma Scale score. The nursing staff should not cluster care because this can cause an increase in the intracranial pressure. The head of the bed should be minimally elevated, up to 30 degrees.

DIF: Applying/Application REF: 935
KEY: Neurologic disorders| stroke| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A nurse has applied to work at a hospital that has National Stroke Center designation. The nurse realizes the hospital adheres to eight Core Measures for ischemic stroke care. What do these Core Measures include? (Select all that apply.)
a. Discharging the client on a statin medication

b. Providing the client with comprehensive therapies
c. Meeting goals for nutrition within 1 week
d. Providing and charting stroke education
e. Preventing venous thromboembolism

ANS: A, D, E
Core Measures established by The Joint Commission include discharging stroke clients on statins, providing and recording stroke education, and taking measures to prevent venous thromboembolism. The client must be assessed for therapies but may go elsewhere for them. Nutrition goals are not part of the Core Measures.

DIF: Remembering/Knowledge REF: 942
KEY: Neurologic disorders| stroke| Core Measures
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nursing student studying traumatic brain injuries (TBIs) should recognize which facts about these disorders? (Select all that apply.)
a. A client with a moderate trauma may need hospitalization.
b. A Glasgow Coma Scale score of 10 indicates a mild brain injury.
c. Only open head injuries can cause a severe TBI.
d. A client with a Glasgow Coma Scale score of 3 has severe TBI.
e. The terms mild TBI and concussion have similar meanings.

ANS: A, D, E
Mild TBI is a term used synonymously with the term concussion. A moderate TBI has a Glasgow Coma Scale (GCS) score of 9 to 12, and these clients may need to be hospitalized. Both open and closed head injuries can cause a severe TBI, which is characterized by a GCS score of 3 to 8.

DIF: Remembering/Knowledge REF: 944
KEY: Neurologic disorders| trauma MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse cares for older clients who have traumatic brain injury. What should the nurse understand about this population? (Select all that apply.)
a. Admission can overwhelm the coping mechanisms for older clients.
b. Alcohol is typically involved in most traumatic brain injuries for this age group.
c. These clients are more susceptible to systemic and wound infections.
d. Other medical conditions can complicate treatment for these clients.
e. Very few traumatic brain injuries occur in this age group.

ANS: A, C, D
Older clients often tolerate stress poorly, which includes being admitted to a hospital that is unfamiliar and noisy. Because of decreased protective mechanisms, they are more susceptible to both local and systemic infections. Other medical conditions can complicate their treatment and recovery. Alcohol is typically not related to traumatic brain injury in this population; such injury is most often from falls and motor vehicle crashes. The 65- to 76-year-old age group has the second highest rate of brain injuries compared to other age groups.

DIF: Remembering/Knowledge REF: 948
KEY: Neurologic disorders| older adults| trauma
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

7. A client has meningitis following brain surgery. What comfort measures may the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Applying a cool washcloth to the head
b. Assisting the client to a position of comfort
c. Keeping voices soft and soothing
d. Maintaining low lighting in the room

e. Providing antipyretics for fever

ANS: A, B, C, D
The client with meningitis often has high fever, pain, and some degree of confusion. Cool washcloths to the forehead are comforting and help with pain. Allowing the client to assume a position of comfort also helps manage pain. Keeping voices low and lights dimmed also helps convey caring in a nonthreatening manner. The nurse provides antipyretics for fever.

DIF: Applying/Application REF: 959
KEY: neurologic disorders| delegation| comfort measures| communication| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A nurse is working with many stroke clients. Which clients would the nurse consider referring to a mental health provider on discharge? (Select all that apply.)
a. Client who exhibits extreme emotional lability
b. Client with an initial National Institutes of Health (NIH) Stroke Scale score of 38
c. Client with mild forgetfulness and a slight limp
d. Client who has a past hospitalization for a suicide attempt
e. Client who is unable to walk or eat 3 weeks post-stroke

ANS: A, B, D, E
Clients most at risk for post-stroke depression are those with a previous history of depression, severe stroke (NIH Stroke Scale score of 38 is severe), and post-stroke physical or cognitive impairment. The client with mild forgetfulness and a slight limp would be a low priority for this referral.

DIF: Applying/Application REF: 932
KEY: Neurologic disorders| stroke| psychosocial response| depression| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

9. A client has a small-bore feeding tube (Dobhoff tube) inserted for continuous enteral feedings while recovering from a traumatic brain injury. What actions should the nurse include in the clients care? (Select all that apply.)
a. Assess tube placement per agency policy.
b. Keep the head of the bed elevated at least 30 degrees.
c. Listen to lung sounds at least every 4 hours.
d. Run continuous feedings on a feeding pump.
e. Use blue dye to determine proper placement.

ANS: A, B, C, D
All of these options are important for client safety when continuous enteral feedings are in use. Blue dye is not used because it can cause lung injury if aspirated.

DIF: Applying/Application REF: 952
KEY: Neurologic disorders| enteral feedings
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A nurse is seeing many clients in the neurosurgical clinic. With which clients should the nurse plan to do more teaching? (Select all that apply.)
a. Client with an aneurysm coil placed 2 months ago who is taking ibuprofen (Motrin) for sinus headaches
b. Client with an aneurysm clip who states that his family is happy there is no chance of recurrence
c. Client who had a coil procedure who says that there will be no problem following up for 1 year
d. Client who underwent a flow diversion procedure 3 months ago who is taking docusate sodium (Colace) for constipation
e. Client who underwent surgical aneurysm ligation 3 months ago who is planning to take a Caribbean cruise

ANS: A, B
After a coil procedure, up to 20% of clients experience re-bleeding in the first year. The client with this coil should not be taking drugs that interfere with clotting. An aneurysm clip can move up to 5 years after placement, so this client and family need to be watchful for changing neurologic status. The other statements show good understanding.

DIF: Evaluating/Synthesis REF: 937
KEY: Neurologic disorders
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse is dismissing a client from the emergency department who has a mild traumatic brain injury. What information obtained from the client represents a possible barrier to self-management? (Select all that apply.)
a. Does not want to purchase a thermometer
b. Is allergic to acetaminophen (Tylenol)
c. Laughing, says Strenuous? Whats that?
d. Lives alone and is new in town with no friends
e. Plans to have a beer and go to bed once home

ANS: B, D, E
Clients should take acetaminophen for headache. An allergy to this drug may mean the client takes aspirin or ibuprofen (Motrin), which should be avoided. The client needs neurologic checks every 1 to 2 hours, and this client does not seem to have anyone available who can do that. Alcohol needs to be avoided for at least 24 hours. A thermometer is not needed. The client laughing at strenuous activity probably does not engage in any kind of strenuous activity, but the nurse should confirm this.

DIF: Evaluating/Synthesis REF: 954
KEY: Neurologic disorders| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

SHORT ANSWER

1. A client in the emergency department is having a stroke and the provider has prescribed the tissue plasminogen activator (t-PA) alteplase (Activase). The client weighs 146 pounds. How much medication will this client receive? (Record your answer using a whole number.) _____ mg

ANS:
60 mg
The dose of t-PA is 0.9 mg/kg with a maximum dose of 90 mg.
The client weighs 66.4 kg.
0.9 mg 66.4 = 59.76 mg, which rounds to 60 mg.

DIF: Applying/Application REF: 936
KEY: Neurologic disorders| thrombolytic agents| drug calculation
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A client in the emergency department is having a stroke. The client weighs 225 pounds. After the initial bolus of t-Pa, at what rate should the nurse set the IV pump? (Record your answer using a decimal rounded to the nearest tenth.) ____ mL/hr

ANS:
1.4 mL/hr
The client weighs 102 kg. The dose of t-PA is 0.9 mg/kg with a maximum of 90 mg, so the clients dose is 90 mg.
10% of the dose is given as a bolus IV over the first minute (9 mg). That leaves 81 mg to run in over 59

minutes.
, which rounds to 1.4 mL/hr.

DIF: Applying/Application REF: 936
KEY: Neurologic disorders| drug calculation| thrombolytic agents
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 46: Assessment of the Eye and Vision

MULTIPLE CHOICE

1. The nurse has given a community group a presentation on eye health. Which statement by a participant indicates a need for more instruction?
a. I always lose my sunglasses, so I dont wear them.
b. I have diabetes and get an annual eye exam.
c. I will not share my contact solution with others.
d. I will wear safety glasses when I mow the lawn.

ANS: A
Clients should be taught to protect their eyes from ultraviolet (UV) exposure by consistently wearing sunglasses when outdoors, when tanning in tanning salons, or when working with UV light. The other statements are correct.

DIF: Remembering/Knowledge REF: 961
KEY: Visual system| health promotion| primary prevention
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

2. The nurse reads on a clients chart that the client has exophthalmos. What assessment finding is consistent with this diagnosis?
a. Bulging eyes
b. Drooping eyelids
c. Sunken-in eyes
d. Yellow sclera

ANS: A
Exophthalmos is bulging eyes. Drooping eyelids is ptosis. Sunken-in eyes is enophthalmos. Yellow sclera indicates jaundice.

DIF: Remembering/Knowledge REF: 963
KEY: Visual system| visual assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A clients chart indicates anisocoria. For what should the nurse assess?
a. Difference in pupil size
b. Draining infection
c. Recent eye trauma
d. Tumor of the eyelid

ANS: A
Anisocoria is a noticeable difference in the size of a persons pupils. This is a normal finding in a small percentage of the population. Infection, trauma, and tumors are not related.

DIF: Remembering/Knowledge REF: 963
KEY: Visual assessment| visual system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A client presents to the emergency department reporting a foreign body in the eye. For what diagnostic testing should the nurse prepare the client?
a. Corneal staining
b. Fluorescein angiography
c. Ophthalmoscopy
d. Tonometry

ANS: A
Corneal staining is used when the possibility of eye trauma exists, including a foreign body. Fluorescein angiography is used to assess problems of retinal circulation. Ophthalmoscopy looks at both internal and external eye structures. Tonometry tests the intraocular pressure.

DIF: Remembering/Knowledge REF: 965
KEY: Visual system| visual assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse who is applying eyedrops to a client holds pressure against the corner of the eye nearest the nose after instilling the drops. The client asks what the nurse is doing. What response by the nurse is best?
a. Doing this allows time for absorption.
b. I am keeping the drops in the eye.
c. This prevents systemic absorption.
d. I am stopping you from rubbing your eye.

ANS: C
This technique, called punctal occlusion, prevents eyedrops from being absorbed systemically. The other answers are inaccurate.

DIF: Understanding/Comprehension REF: 966
KEY: Visual system| medication administration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. The nurse is administering eyedrops to a client with an infection in the right eye. The drops go in both eyes, and two different bottles are used to administer the drops. The nurse accidentally uses the left eye bottle for the right eye. What action by the nurse is best?
a. Inform the provider of the issue.
b. Obtain a new bottle of eyedrops.
c. Rinse the clients right eye thoroughly.
d. Wipe the left eye bottle with alcohol.

ANS: B
The nurse has contaminated the clean bottle by using it on the infected eye. The nurse needs to obtain a new bottle of solution to use on the left eye. The other actions are not appropriate.

DIF: Applying/Application REF: 966
KEY: Visual system| medication administration| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. The nurse enters an examination room to help with an eye examination. The client is directed toward the assessment chart shown below:

What is the provider assessing?
a. Color vision
b. Depth perception
c. Spatial perception
d. Visual acuity

ANS: A
This is an Ishihara chart, which is used for assessing color vision. Depth and spatial perception are not typically assessed in a routine vision assessment. Visual acuity is usually tested with a Snellen chart.

DIF: Remembering/Knowledge REF: 964
KEY: Visual system| visual assessment
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. The student learning about vision should remember which facts related to the eyes? (Select all that apply.)
a. Aqueous humor controls intraocular pressure.
b. Cones work in low light conditions.
c. Glaucoma occurs due to increased pressure in the eye.
d. Muscles of the iris control light entering the eye.
e. Rods work in low light conditions.

ANS: A, C, D, E
The inflow and outflow of aqueous humor controls the intraocular pressure. Glaucoma results when the pressure is chronically high. Muscles of the iris relax and constrict to control the amount of light entering the eye. Rods work in low light conditions. Cones work in bright light conditions.

DIF: Remembering/Knowledge REF: 957
KEY: Visual system
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. The nursing student studying the eye learns that which cranial nerves control its functions? (Select all that apply.)
a. II
b. III
c. VI
d. XII
e. X

ANS: A, B, C
The cranial nerves involved with eye function include II, III, IV, V, VI, and VII.

DIF: Remembering/Knowledge REF: 959
KEY: Visual system
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. The nursing student learns that age-related changes affect the eyes and vision. Which changes does this include? (Select all that apply.)
a. Decreased eye muscle tone
b. Development of arcus senilis
c. Increase in far point of near vision
d. Decrease in general color perception
e. Increase in point of near vision

ANS: A, B, D, E
Normal age-related changes include decreased eye muscle tone, development of arcus senilis, decreased color perception, and increased point of near vision. The far point of near vision typically decreases.

DIF: Remembering/Knowledge REF: 960
KEY: Visual system
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 47: Care of Patients with Eye and Vision Problems

MULTIPLE CHOICE

1. A client has a corneal ulcer. What information provided by the client most indicates a potential barrier to home care?
a. Chronic use of sleeping pills
b. Impaired near vision
c. Slightly shaking hands
d. Use of contact lenses

ANS: A
Antibiotic eyedrops are often needed every hour for the first 24 hours for corneal ulceration. The client who uses sleeping pills may not wake up each hour or may awaken unable to perform this task. This client might need someone else to instill the eyedrops hourly. Impaired near vision and shaking hands can both make administration of eyedrops more difficult but are not the most likely barriers. Contact lenses should be discarded.

DIF: Analyzing/Analysis REF: 971
KEY: Visual system| visual disorders| medication administration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. An older client has decided to give up driving due to cataracts. What assessment information is most important to collect?
a. Family history of visual problems
b. Feelings related to loss of driving
c. Knowledge about surgical options
d. Presence of family support

ANS: B
Loss of driving is often associated with loss of independence, as is decreasing vision. The nurse should assess how the client feels about this decision and what its impact will be. Family history and knowledge about surgical options are not related as the client has made a decision to decline surgery. Family support is also useful information, but it is most important to get the clients perspective on this change.

DIF: Applying/Application REF: 974
KEY: Visual system| visual disorders| cataracts| older adult| coping| psychosocial response
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

3. A client is in the preoperative holding area waiting for cataract surgery. The client says Oh, yeah, I forgot to tell you that I take clopidogrel, or Plavix. What action by the nurse is most important?
a. Ask the client when the last dose was.
b. Check results of the prothrombin time (PT) and international normalized ratio (INR).
c. Document the information in the chart.
d. Notify the surgeon immediately.

ANS: D
Clopidogrel is an antiplatelet aggregate and could increase bleeding. The surgeon should be notified immediately. The nurse should find out when the last dose of the drug was, but the priority is to notify the provider. This drug is not monitored with PT and INR. Documentation should occur but is not the priority.

DIF: Applying/Application REF: 974
KEY: Visual system| visual disorders| cataracts| preoperative nursing| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A client does not understand why vision loss due to glaucoma is irreversible. What explanation by the nurse

is best?
a. Because eye pressure was too high, the tissue died.
b. Glaucoma always leads to permanent blindness.
c. The traumatic damage to your eye was too great.
d. The infection occurs so quickly it cant be treated.

ANS: A
Glaucoma is caused when the intraocular pressure becomes too high and stays high long enough to cause tissue ischemia and death. At that point, vision loss is permanent. Glaucoma does not have to cause blindness. Trauma can cause glaucoma but is not the most common cause. Glaucoma is not an infection.

DIF: Understanding/Comprehension REF: 976
KEY: Visual system| visual disorders| glaucoma| patient education| pathophysiology
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A clients intraocular pressure (IOP) is 28 mm Hg. What action by the nurse is best?
a. Educate the client on corneal transplantation.
b. Facilitate scheduling the eye surgery.
c. Plan to teach about drugs for glaucoma.
d. Refer the client to local Braille classes.

ANS: C
This increased IOP indicates glaucoma. The nurses main responsibility is teaching the client about drug therapy. Corneal transplantation is not used in glaucoma. Eye surgery is not indicated at this time. Braille classes are also not indicated at this time.

DIF: Applying/Application REF: 976
KEY: Visual system| visual disorders| glaucoma| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A client had a retinal detachment and has undergone surgical correction. What discharge instruction is most important?
a. Avoid reading, writing, or close work such as sewing.
b. Dim the lights in your house for at least a week.
c. Keep the follow-up appointment with the ophthalmologist.
d. Remove your eye patch every hour for eyedrops.

ANS: A
After surgery for retinal detachment, the client is advised to avoid reading, writing, and close work because they cause rapid eye movements. Dim lights are not indicated. Keeping a postoperative appointment is important for any surgical client. The eye patch is not removed for eyedrops.

DIF: Understanding/Comprehension REF: 981
KEY: Visual system| visual disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A client has been taught about retinitis pigmentosa (RP). What statement by the client indicates a need for further teaching?
a. Beta carotene, lutein, and zeaxanthin are good supplements.
b. I might qualify for a retinal transplant one day soon.
c. Since Im going blind, sunglasses are not needed anymore.
d. Vitamin A has been shown to slow progression of RP.

ANS: C
Sunglasses are needed to prevent the development of cataracts in addition to the RP. The other statements are accurate.

DIF: Evaluating/Synthesis REF: 981
KEY: Visual system| visual disorders| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. A client has a foreign body in the eye. What action by the nurse takes priority?
a. Administering ordered antibiotics
b. Assessing the clients visual acuity
c. Obtaining consent for enucleation
d. Removing the object immediately

ANS: A
To prevent infection, antibiotics are provided. Visual acuity in the affected eye cannot be assessed. The client may or may not need enucleation. The object is only removed by the ophthalmologist.

DIF: Applying/Application REF: 983
KEY: Visual system| visual disorders| antibiotics
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A client who is near blind is admitted to the hospital. What action by the nurse is most important?
a. Allow the client to feel his or her way around.
b. Let the client arrange objects on the bedside table.
c. Orient the client to the room using a focal point.
d. Speak loudly and slowing when talking to the client.

ANS: C
Using a focal point, orient the client to the room by giving descriptions of items as they relate to the focal point. Letting the client arrange the bedside table is a good idea, but not as important as orienting the client to the room for safety. Allowing the client to just feel around may cause injury. Unless the client is also hearing impaired, use a normal tone of voice.

DIF: Remembering/Knowledge REF: 984
KEY: Visual system| visual disorders| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A client had proxymetacaine (Ocu-Caine) instilled in one eye in the emergency department. What discharge instruction is most important?
a. Do not touch or rub the eye until it is no longer numb.
b. Monitor the eye for any bleeding for the next day.
c. Rinse the eye with warm saline solution at home.
d. Use all the eyedrops as prescribed until they are gone.

ANS: A
This drug is an ophthalmic anesthetic. The client can injure the numb eye by touching or rubbing it. Bleeding is not associated with this drug. The client should not be told to rinse the eye. This medication was given in the emergency department and is not prescribed for home use.

DIF: Understanding/Comprehension REF: 970
KEY: Visual system| visual disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11. A client is taking timolol (Timoptic) eyedrops. The nurse assesses the clients pulse at 48 beats/min. What action by the nurse is the priority?
a. Ask the client about excessive salivation.
b. Assess the client for shortness of breath.
c. Give the drops using punctal occlusion.

d. Hold the eyedrops and notify the provider.

ANS: D
The nurse should hold the eyedrops and notify the provider because beta blockers can slow the heart rate. Excessive salivation can occur with cholinergic agonists. Shortness of breath is not related. If the drops are given, the nurse uses punctal occlusion to avoid systemic absorption.

DIF: Applying/Application REF: 979
KEY: Visual system| visual disorders| beta blockers
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A client has been prescribed brinzolamide (Azopt). What assessment by the nurse requires consultation with the provider?
a. Allergy to eggs
b. Allergy to sulfonamides
c. Use of contact lenses
d. Use of beta blockers

ANS: B
Brinzolamide is similar to sulfonamides, so an allergic reaction could occur. The other assessment findings are not related to brinzolamide.

DIF: Applying/Application REF: 979
KEY: Visual system| visual disorders| nursing assessment| antibiotics
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A client is brought to the emergency department after a car crash. The client has a large piece of glass in the left eye. What action by the nurse takes priority?
a. Administer a tetanus booster shot.
b. Ensure the client has a patent airway.
c. Prepare to irrigate the clients eye.
d. Turn the client on the unaffected side.

ANS: B
Airway always comes first. After ensuring a patent airway and providing cervical spine precautions (do not turn the client to the side), the nurse provides other care that may include administering a tetanus shot. The clients eye may or may not be irrigated.

DIF: Applying/Application REF: 983
KEY: Visual system| visual disturbances| primary survey
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A nurse is seeing clients in the ophthalmology clinic. Which client should the nurse see first?
a. Client with intraocular pressure reading of 24 mm Hg
b. Client who has had cataract surgery and has worsening vision
c. Client whose red reflex is absent on ophthalmologic examination
d. Client with a tearing, reddened eye with exudate

ANS: B
After cataract surgery, worsening vision indicates an infection or other complication. The nurse should see this client first. The intraocular pressure is slightly elevated. An absent red reflex may indicate cataracts. The client who has the tearing eye may have an infection.

DIF: Applying/Application REF: 975
KEY: Visual system| visual disorders
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. The nurse working in the ophthalmology clinic sees clients with eyelid and eye problems. What information should the nurse understand about these disorders? (Select all that apply.)
a. A chalazion is an inflammation of an eyelid sebaceous gland.
b. An ectropion is the eyelid turning inward.
c. An entropion is the eyelid turning outward.
d. A hordeolum is an infection of the eyelid sweat gland.
e. Keratoconjunctivitis sicca is caused by drugs or diseases.

ANS: A, D, E
A chalazion is an inflammation of one of the sebaceous glands in the eyelid. A hordeolum is an infection of a sweat gland in the eyelid. Keratoconjunctivitis sicca can be caused by drugs or diseases. An ectropion is an outward turning and sagging eyelid, while an entropion is an inward turning of the eyelid.

DIF: Remembering/Knowledge REF: 968
KEY: Visual system| visual disorders MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A client is seen in the ophthalmology clinic with bacterial conjunctivitis. Which statements by the client indicate a good understanding of home management of this condition? (Select all that apply.)
a. As long as I dont wipe my eyes, I can share my towel.
b. Eye irrigations should be done with warm saline or water.
c. I will throw away all my eye makeup when I get home.
d. I wont touch the tip of the eyedrop bottle to my eye.
e. When the infection is gone, I can use my contacts again.

ANS: C, D
Bacterial conjunctivitis is very contagious, and re-infection or cross-contamination between the clients eyes is possible. The client should discard all eye makeup being used at the time the infection started. When instilling eyedrops, the client must be careful not to contaminate the bottle by touching the tip to the eye or face. The client should be instructed not to share towels. Eye irrigations are not needed. Contacts being used when the infection first manifests also need to be discarded.

DIF: Evaluating/Synthesis REF: 970
KEY: Visual system| visual disorders
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

3. A client had cataract surgery. What instructions should the nurse provide? (Select all that apply.)
a. Call the doctor for increased pain.
b. Do not bend over from the waist.
c. Do not lift more than 10 pounds.
d. Sexual intercourse is allowed.
e. Use stool softeners to avoid constipation.

ANS: A, B, C, E
The client should be taught to call the physician for increased pain as this might indicate infection or other complication. To avoid increasing intraocular pressure, clients are taught to not lift more than 10 pounds, to avoid bending at the waist, to avoid straining at stool, and to avoid sexual intercourse for a time after surgery.

DIF: Understanding/Comprehension REF: 973
KEY: Visual system| visual disorders| cataracts
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse has delegated applying a warm compress to a clients eye. What actions by the unlicensed assistive

personnel (UAP) warrant intervention by the nurse? (Select all that apply.)
a. Heating the wet washcloth in the microwave
b. Holding the cloth on the client using an Ace wrap
c. Turning the cloth so it remains warm on the client
d. Using a clean washcloth for the compress
e. Washing the hands on entering the clients room

ANS: A, B
The washcloth should be warmed under running warm water. Microwaving it can lead to burns. Gentle pressure is used to hold the compress in place. The other actions are correct.

DIF: Applying/Application REF: 971
KEY: Visual system| visual disorders| nonpharmacologic comfort measures| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

Chapter 48: Assessment and Care of Patients with Ear and Hearing Problems

MULTIPLE CHOICE

1. A nurse is teaching a client about ear hygiene and health. What client statement indicates a need for further teaching?
a. A soft cotton swab is alright to clean my ears with.
b. I make sure my ears are dry after I go swimming.
c. I use good earplugs when I practice with the band.
d. Keeping my diabetes under control helps my ears.

ANS: A
Clients should be taught not to put anything larger than their fingertip into their ears. Using a cotton swab, although soft, can cause damage to the ears and cerumen buildup. The other statements are accurate.

DIF: Evaluating/Synthesis REF: 993
KEY: Auditory system| auditory assessment
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

2. The student nurse is performing a Weber tuning fork test. What technique is most appropriate?
a. Holding the vibrating tuning fork 10 to 12 inches from the clients ear
b. Placing the vibrating fork in the middle of the clients head
c. Starting by placing the vibrating fork on the mastoid process
d. Tapping the vibrating tuning fork against the bridge of the nose

ANS: B
The Weber tuning fork test includes placing the vibrating tuning fork in the middle of the clients head and asking in which ear the client hears the vibrations louder. The other techniques are incorrect.

DIF: Applying/Application REF: 989
KEY: Auditory system| auditory assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. The clients chart indicates a sensorineural hearing loss. What assessment question does the nurse ask to determine the possible cause?
a. Do you feel like something is in your ear?
b. Do you have frequent ear infections?
c. Have you been exposed to loud noises?
d. Have you been told your ear bones dont move?

ANS: C
Sensorineural hearing loss can occur from damage to the cochlea, the eighth cranial nerve, or the brain. Exposure to loud music is one etiology. The other questions relate to conductive hearing loss.

DIF: Remembering/Knowledge REF: 989
KEY: Auditory system| auditory assessment| auditory disorders
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. The nurse works with clients who have hearing problems. Which action by a client best indicates goals for an important diagnosis have been met?
a. Babysitting the grandchildren several times a week
b. Having an adaptive hearing device for the television
c. Being active in community events and volunteer work
d. Responding agreeably to suggestions for adaptive devices

ANS: C
Clients with hearing problems can become frustrated and withdrawn. The client who is actively engaged in the community shows the best evidence of psychosocial adjustment to hearing loss. Babysitting the grandchildren is a positive sign but does not indicate involvement outside the home. Having an adaptive device is not the same as using it, and watching TV without evidence of other activities can also indicate social isolation. Responding agreeably does not indicate the client will actually follow through.

DIF: Evaluating/Synthesis REF: 990
KEY: Auditory system| auditory disorders| psychosocial response| coping
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Psychosocial Integrity

5. A client has external otitis. On what comfort measure does the nurse instruct the client?
a. Applying ice four times a day
b. Instilling vinegar-and-water drops
c. Use of a heating pad to the ear
d. Using a home humidifier

ANS: C
A heating pad on low or a warm moist pack can provide comfort to the client with otitis externa. The other options are not warranted.

DIF: Remembering/Knowledge REF: 992
KEY: Auditory system| auditory disorders| comfort measures
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. An older adult in the family practice clinic reports a decrease in hearing over a week. What action by the nurse is most appropriate?
a. Assess for cerumen buildup.
b. Facilitate audiological testing.
c. Perform tuning fork tests.
d. Review the medication list.

ANS: A
All options are possible actions for the client with hearing loss. The first action the nurse should take is to look for cerumen buildup, which can decrease hearing in the older adult. If this is normal, medications should be assessed for ototoxicity. Further auditory testing may be needed for this client.

DIF: Applying/Application REF: 992
KEY: Auditory system| auditory assessment| auditory disorders| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A client had a myringotomy. The nurse provides which discharge teaching?
a. Buy dry shampoo to use for a week.
b. Drink liquids through a straw.
c. Flying is not allowed for 1 month.
d. Hot water showers will help the pain.

ANS: A
The client cannot shower or get the head wet for 1 week after surgery, so using dry shampoo is a good suggestion. The other instructions are incorrect: straws are not allowed for 2 to 3 weeks, flying is not allowed for 2 to 3 weeks, and the client should not shower.

DIF: Applying/Application REF: 995
KEY: Auditory system| auditory disorders| patient education
MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

8. A client is going on a cruise but has had motion sickness in the past. What suggestion does the nurse make to this client?
a. Avoid alcohol on the cruise ship.
b. Change positions slowly on the ship.
c. Change your travel plans.
d. Try scopolamine (Transderm Scop).

ANS: D
Scopolamine can successfully treat the vertigo and dizziness associated with motion sickness. Avoiding alcohol and changing positions slowly are not effective. Telling the client to change travel plans is not a caring suggestion.

DIF: Applying/Application REF: 996
KEY: Auditory system| auditory disorders
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A nurse is teaching a community group about noise-induced hearing loss. Which client who does not use ear protection should the nurse refer to an audiologist as the priority?
a. Client with an hour car commute on the freeway each day
b. Client who rides a motorcycle to work 20 minutes each way
c. Client who sat in the back row at a rock concert recently
d. Client who is a tree-trimmer and uses a chainsaw 6 to 7 hours a day

ANS: D
A chainsaw becomes dangerous to hearing after 2 hours of exposure without hearing protection. This client needs to be referred as the priority. Normal car traffic is safe for more than 8 hours. Motorcycle noise is safe for about 8 hours. The safe exposure time for a front-row rock concert seat is 3 minutes, but this client was in the back, and so had less exposure. In addition, a one-time exposure is less damaging than chronic exposure.

DIF: Remembering/Knowledge REF: 990
KEY: Auditory system| auditory disorders| referrals
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nursing student is instructed to remove a clients ear packing and instill eardrops. What action by the student requires intervention by the registered nurse?
a. Assessing the eardrum with an otoscope
b. Inserting a cotton ball in the ear after the drops
c. Warming the eardrops in water for 5 minutes
d. Washing the hands and removing the packing

ANS: D
The student should wash his or her hands, don gloves, and then remove the packing. The other actions are correct.

DIF: Applying/Application REF: 992
KEY: Auditory system| auditory disorders
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A nurse is irrigating a clients ear when the client becomes nauseated. What action by the nurse is most appropriate for client comfort?
a. Have the client tilt the head back.
b. Re-position the client on the other side.
c. Slow the rate of the irrigation.
d. Stop the irrigation immediately.

ANS: D
During ear irrigation, if the client becomes nauseated, stop the procedure. The other options are not helpful.

DIF: Remembering/Knowledge REF: 993
KEY: Auditory system| auditory disorders
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

12. A client hospitalized for a wound infection has a blood urea nitrogen of 45 mg/dL and creatinine of 4.2 mg/dL. What action by the nurse is best?
a. Assess the ordered antibiotics for ototoxicity.
b. Explain how kidney damage causes hearing loss.
c. Use ibuprofen (Motrin) for pain control.
d. Teach that hearing loss is temporary.

ANS: A
Some medications are known to be ototoxic. Diminished kidney function slows the excretion of drugs from the body, worsening the ototoxic effects. The nurse should assess the antibiotics the client is receiving for ototoxicity. The other options are not warranted.

DIF: Analyzing/Analysis REF: 988
KEY: Auditory system| auditory disorders| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse is teaching a community group about preventing hearing loss. What instruction is best?
a. Always wear a bicycle helmet.
b. Avoid swimming in ponds or lakes.
c. Dont go to fireworks displays.
d. Use a soft cotton swab to clean ears.

ANS: A
Avoiding head trauma is a practical way to help prevent hearing loss. Swimming can lead to hearing loss if the client has repeated infections. Fireworks displays are loud, but usually brief and only occasional. Nothing smaller than the clients fingertip should be placed in the ear canal.

DIF: Applying/Application REF: 995
KEY: Auditory system| auditory disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

14. A client has severe tinnitus that cannot be treated adequately. What action by the nurse is best?
a. Advise the client to take antianxiety medication.
b. Educate the client on nerve cutting procedures.
c. Refer the client to online or local support groups.
d. Teach the client side effects of furosemide (Lasix).

ANS: C
If the clients tinnitus cannot be treated, he or she will have to learn to cope with it. Referring the client to tinnitus support groups can be helpful. The other options are not warranted.

DIF: Applying/Application REF: 996
KEY: Auditory system| auditory disorders| referrals| coping
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A client has labyrinthitis and is prescribed antibiotics. What instruction by the nurse is most important for this client?

a. Immediately report headache or stiff neck.
b. Keep all follow-up appointments.
c. Take the antibiotics with a full glass of water.
d. Take the antibiotic on an empty stomach.

ANS: A
Meningitis is a complication of labyrinthitis. The client should be taught to take all antibiotics as prescribed and to report manifestations of meningitis such as fever, headache, or stiff neck. Keeping follow-up appointments is important for all clients. Without knowing what antibiotic was prescribed, the nurse cannot instruct the client on how to take it.

DIF: Applying/Application REF: 996
KEY: Auditory system| auditory disorders| patient education| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

16. A client with Mnires disease is in the hospital when the client has an attack of this disorder. What action by the nurse takes priority?
a. Assess vital signs every 15 minutes.
b. Dim or turn off lights in the clients room.
c. Place the client in bed with the upper siderails up.
d. Provide a cool, wet cloth for the clients face.

ANS: C
Clients with Mnires disease can have vertigo so severe that they can fall. The nurse should assist the client into bed and put the siderails up to keep the client from falling out of bed due to the intense whirling feeling. The other actions are not warranted for clients with Mnires disease.

DIF: Applying/Application REF: 996
KEY: Auditory system| auditory disorders| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

17. A client is scheduled to have a tumor of the middle ear removed. What teaching topic is most important for the nurse to cover?
a. Expecting hearing loss in the affected ear
b. Managing postoperative pain
c. Maintaining NPO status prior to surgery
d. Understanding which medications are allowed the day of surgery

ANS: A
Removal of an inner ear tumor will likely destroy hearing in the affected ear. The other teaching topics are appropriate for any surgical client.

DIF: Remembering/Knowledge REF: 995
KEY: Auditory disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. A nursing student studying the auditory system learns about the structures of the inner ear. What structures does this include? (Select all that apply.)
a. Cochlea
b. Epitympanum
c. Organ of Corti
d. Semicircular canals
e. Vestibule

ANS: A, C, D, E
The cochlea, organ of Corti, semicircular canals, and vestibule are all part of the inner ear. The epitympanum is in the middle ear.

DIF: Remembering/Knowledge REF: 985
KEY: Auditory system| auditory assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A client has Mnires disease with frequent attacks. About what drugs does the nurse plan to teach the client? (Select all that apply.)
a. Broad-spectrum antibiotics
b. Chlorpromazine hydrochloride (Thorazine)
c. Diphenhydramine (Benadryl)
d. Meclizine (Antivert)
e. Nonsteroidal anti-inflammatory drugs (NSAIDs)

ANS: B, C, D
Drugs such as chlorpromazine, diphenhydramine, and meclizine can all be used to treat Mnires disease. Antibiotics and NSAIDs are not used.

DIF: Remembering/Knowledge REF: 996
KEY: Auditory system| auditory disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A client is scheduled for a tympanoplasty. What actions by the nurse are most appropriate? (Select all that apply.)
a. Administer preoperative antibiotics.
b. Assess for allergies to local anesthetics.
c. Ensure that informed consent is on the chart.
d. Give ordered antivertigo medications.
e. Teach that hearing improves immediately.

ANS: A, C
Preoperatively, the nurse administers antibiotics and ensures that informed consent is on the chart. Local anesthetics can be used, but general anesthesia is used more often. Antivertigo medications are not used. Hearing will be decreased immediately after the operation until the ear packing is removed.

DIF: Applying/Application REF: 1000
KEY: Auditory system| auditory disorders| preoperative nursing| informed consent
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A client has a hearing aid. What care instructions does the nurse provide the unlicensed assistive personnel (UAP) in the care of this client? (Select all that apply.)
a. Be careful not to drop the hearing aid when handling.
b. Soak the hearing aid in hot water for 20 minutes.
c. Turn the hearing aid off when the client goes to bed.
d. Use a toothpick to clean debris from the device.
e. Wash the device with soap and a small amount of warm water.

ANS: A, C, D, E
All these actions except soaking the hearing aid are proper instructions for the nurse to give to the UAP. While some water is used to clean the hearing aid, excessive wetting should be avoided.

DIF: Remembering/Knowledge REF: 999
KEY: Auditory system| auditory disorders| assistive devices| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A hospitalized client has Mnires disease. What menu selections demonstrate good knowledge of the recommended diet for this disorder? (Select all that apply.)
a. Chinese stir fry with vegetables
b. Broiled chicken breast
c. Chocolate espresso cookies
d. Deli turkey sandwich and chips
e. Green herbal tea with meals

ANS: B, E
The diet recommendations for Mnires disease include low-sodium, caffeine-free foods and fluids distributed evenly throughout the day. Plenty of water is also needed. The broiled chicken breast and herbal tea are the best selections. The stir fry is high in sodium and possibly monosodium glutamate (MSG, also not recommended). The cookies have caffeine, and the sandwich and chips are high in sodium.

DIF: Evaluating/Synthesis REF: 999
KEY: Auditory system| auditory disorders| nursing evaluation
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A client is scheduled for a stapedectomy in 2 weeks. What teaching instructions are most appropriate? (Select all that apply.)
a. Avoid alcohol use before surgery.
b. Blow the nose gently if needed.
c. Clean the telephone often.
d. Sneeze with the mouth open.
e. Wash the external ear daily.

ANS: B, C, D, E
It is imperative that the client having a stapedectomy is free from ear infection. Teaching includes ways to prevent such infections, such as blowing the nose gently, cleaning objects that come into contact with the ear, sneezing with the mouth open, and washing the external ear daily. Avoiding alcohol will not help prevent ear infections.

DIF: Applying/Application REF: 996
KEY: Auditory system| auditory disorders| patient education| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A client is admitted to the nursing unit after having a tympanoplasty. What activities does the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Administer prescribed antibiotics.
b. Keep the head of the clients bed flat.
c. Remind the client to lie on the operative side.
d. Remove the iodoform gauze in 8 hours.
e. Take and record postoperative vital signs.

ANS: B, E
The UAP can keep the head of the clients bed flat and take/record vital signs. The nurse administers medications. The client should lie flat with the head turned so the operative side is up. The nurse or surgeon removes the gauze packing.

DIF: Applying/Application REF: 1001
KEY: Auditory system| auditory disorders| delegation| postoperative nursing| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 49: Assessment of the Musculoskeletal System

MULTIPLE CHOICE

1. A client is having a myelography. What action by the nurse is most important?
a. Assess serum aspartate aminotransferase (AST) levels.
b. Ensure that informed consent is on the chart.
c. Position the client flat after the procedure.
d. Reinforce the dressing if it becomes saturated.

ANS: B
This diagnostic procedure is invasive and requires informed consent. The AST does not need to be assessed prior to the procedure. The client is positioned with the head of the bed elevated after the test to keep the contrast material out of the brain. The dressing should not become saturated; if it does, the nurse calls the provider.

DIF: Applying/Application REF: 1012
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A client is undergoing computed tomography (CT) of a joint. What action by the nurse is most important before the test?
a. Administer sedation as prescribed.
b. Assess for seafood or iodine allergy.
c. Ensure that the client has no metal on the body.
d. Provide preprocedure pain medication.

ANS: B
Because CT uses iodine-based contrast material, the nurse assesses the client for allergies to iodine or seafood (which often contains iodine). The other actions are not needed.

DIF: Applying/Application REF: 1015
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| diagnostic testing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. A client had an arthroscopy 1 hour ago on the left knee. The nurse finds the left lower leg to be pale and cool, with 1+/4+ pedal pulses. What action by the nurse is best?
a. Assess the neurovascular status of the right leg.
b. Document the findings in the clients chart.
c. Elevate the left leg on at least two pillows.
d. Notify the provider of the findings immediately.

ANS: A
The nurse should compare findings of the two legs as these findings may be normal for the client. If a difference is observed, the nurse notifies the provider. Documentation should occur after the nurse has all the data. Elevating the left leg will not improve perfusion if there is a problem.

DIF: Applying/Application REF: 1014
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A hospitalized clients strength of the upper extremities is rated at 3. What does the nurse understand about this clients ability to perform activities of daily living (ADLs)?
a. The client is able to perform ADLs but not lift some items.
b. No difficulties are expected with ADLs.
c. The client is unable to perform ADLs alone.

d. The client would need near-total assistance with ADLs.

ANS: A
This rating indicates fair muscle strength with full range of motion against gravity but not resistance. The client could complete ADLs independently unless they required lifting objects.

DIF: Understanding/Comprehension REF: 1011
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A client is distressed at body changes related to kyphosis. What response by the nurse is best?
a. Ask the client to explain more about these feelings.
b. Explain that these changes are irreversible.
c. Offer to help select clothes to hide the deformity.
d. Tell the client safety is more important than looks.

ANS: A
Assessment is the first step of the nursing process, and the nurse should begin by getting as much information about the clients feelings as possible. Explaining that the changes are irreversible discounts the clients feelings. Depending on the extent of the deformity, clothing will not hide it. While safety is more objectively important than looks, the client is worried about looks and the nurse needs to address this issue.

DIF: Applying/Application REF: 1008
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| psychosocial response| coping| therapeutic communication
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

6. The nurse knows that hematopoiesis occurs in what part of the musculoskeletal system?
a. Cancellous tissue
b. Collagen matrix
c. Red marrow
d. Yellow marrow

ANS: C
Hematopoiesis occurs in the red marrow, which is part of the cancellous tissues containing both types of bone marrow.

DIF: Remembering/Knowledge REF: 1005
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse is providing community education about preventing traumatic musculoskeletal injuries related to car crashes. Which group does the nurse target as the priority for this education?
a. High school football team
b. High school homeroom class
c. Middle-aged men
d. Older adult women

ANS: A
Young men are at highest risk for musculoskeletal injury due to trauma, especially due to motor vehicle crashes. The high school football team, with its roster of young males, is the priority group.

DIF: Applying/Application REF: 1007
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A school nurse is conducting scoliosis screening. In screening the client, what technique is most appropriate?
a. Bending forward from the hips
b. Sitting upright with arms outstretched
c. Walking across the room and back
d. Walking with both eyes closed

ANS: A
To assess for scoliosis, a spinal deformity, the student should bend forward at the hips. Standing behind the student, the nurse looks for a lateral curve in the spine. The other actions are not correct.

DIF: Applying/Application REF: 1010
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| nursing assessment| secondary prevention
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

9. The clients chart indicates genu varum. What does the nurse understand this to mean?
a. Bow-legged
b. Fluid accumulation
c. Knock-kneed
d. Spinal curvature

ANS: A
Genu varum is a bow-legged deformity. A fluid accumulation is an effusion. Genu valgum is knock-kneed. A spinal curvature could be kyphosis or lordosis.

DIF: Remembering/Knowledge REF: 1010
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. The nurse is assessing four clients with musculoskeletal disorders. The nurse should assess the client with which laboratory result first?
a. Serum alkaline phosphatase (ALP): 108 units/L
b. Serum aspartate aminotransferase (AST): 26 units/L
c. Serum calcium: 10.2 mg/dL
d. Serum phosphorus: 2 mg/dL

ANS: D
A normal serum phosphorus level is 3 to 4.5 mg/dL; a level of 2 mg/dL is low, and this client should be assessed first. The values for serum ALP, AST, and calcium are all within normal ranges.

DIF: Understanding/Comprehension REF: 1011
KEY: Musculoskeletal system| musculoskeletal assessment| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nursing student studying the musculoskeletal system learns about important related hormones. What information does the student learn? (Select all that apply.)
a. A lack of vitamin D can lead to rickets.
b. Calcitonin increases serum calcium levels.
c. Estrogens stimulate osteoblastic activity.
d. Parathyroid hormone stimulates osteoclastic activity.
e. Thyroxine stimulates estrogen release.

ANS: A, C, D

Vitamin D is needed to absorb calcium and phosphorus. A deficiency of vitamin D can lead to rickets. Estrogen stimulates osteoblastic activity. Parathyroid hormone stimulates osteoclastic activity. Calcitonin decreases serum calcium levels when they get too high. Thyroxine increases the rate of protein synthesis in all tissue types.

DIF: Remembering/Knowledge REF: 1006
KEY: Musculoskeletal system MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A student nurse learns about changes that occur to the musculoskeletal system due to aging. Which changes does this include? (Select all that apply.)
a. Bone changes lead to potential safety risks.
b. Increased bone density leads to stiffness.
c. Osteoarthritis occurs due to cartilage degeneration.
d. Osteoporosis is a universal occurrence.
e. Some muscle tissue atrophy occurs with aging.

ANS: A, C, E
Many age-related changes occur in the musculoskeletal system, including decreased bone density, degeneration of cartilage, and some degree of muscle tissue atrophy. Osteoporosis, while common, is not universal. Bone density decreases with age, not increases.

DIF: Remembering/Knowledge REF: 1007
KEY: Musculoskeletal system| musculoskeletal disorders| older adult
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. An older clients serum calcium level is 8.7 mg/dL. What possible etiologies does the nurse consider for this result? (Select all that apply.)
a. Good dietary intake of calcium and vitamin D
b. Normal age-related decrease in serum calcium
c. Possible occurrence of osteoporosis or osteomalacia
d. Potential for metastatic cancer or Pagets disease
e. Recent bone fracture in a healing stage

ANS: B, C
This slightly low calcium level could be an age-related decrease in serum calcium or could indicate a metabolic bone disease such as osteoporosis or osteomalacia. A good dietary intake would be expected to produce normal values. Metastatic cancer, Pagets disease, or healing bone fractures will elevate calcium.

DIF: Remembering/Knowledge REF: 1011
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| laboratory values MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. When assessing gait, what features does the nurse inspect? (Select all that apply.)
a. Balance
b. Ease of stride
c. Goniometer readings
d. Length of stride
e. Steadiness

ANS: A, B, D, E
To assess gait, look at balance, ease and length of stride, and steadiness. Goniometer readings assess flexion and extension or joint range of motion.

DIF: Remembering/Knowledge REF: 1008
KEY: Musculoskeletal system| musculoskeletal assessment| musculoskeletal disorders| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 50: Care of Patients with Musculoskeletal Problems

MULTIPLE CHOICE

1. A client has a bone density score of 2.8. What action by the nurse is best?
a. Asking the client to complete a food diary
b. Planning to teach about bisphosphonates
c. Scheduling another scan in 2 years
d. Scheduling another scan in 6 months

ANS: B
A T-score from a bone density scan at or lower than 2.5 indicates osteoporosis. The nurse should plan to teach about medications used to treat this disease. One class of such medications is bisphosphonates. A food diary is helpful to determine if the client gets adequate calcium and vitamin D, but at this point, dietary changes will not prevent the disease. Simply scheduling another scan will not help treat the disease either.

DIF: Applying/Application REF: 1016
KEY: Musculoskeletal disorders| patient education| bisphosphonates
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse is assessing an older client and discovers back pain with tenderness along T2 and T3. What action by the nurse is best?
a. Consult with the provider about an x-ray.
b. Encourage the client to use ibuprofen (Motrin).
c. Have the client perform hip range of motion.
d. Place the client in a rigid cervical collar.

ANS: A
Back pain with tenderness is indicative of a spinal compression fracture, which is the most common type of osteoporotic fracture. The nurse should consult the provider about an x-ray. Motrin may be indicated but not until there is a diagnosis. Range of motion of the hips is not related, although limited spinal range of motion may be found with a vertebral compression fracture. Since the defect is in the thoracic spine, a cervical collar is not needed.

DIF: Applying/Application REF: 1018
KEY: Musculoskeletal assessment| osteoporosis| older adult| pain
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A client has been advised to perform weight-bearing exercises to help minimize osteoporosis. The client admits to not doing the prescribed exercises. What action by the nurse is best?
a. Ask the client about fear of falling.
b. Instruct the client to increase calcium.
c. Suggest other exercises the client can do.
d. Tell the client to try weight lifting.

ANS: A
Fear of falling can limit participation in activity. The nurse should first assess if the client has this fear and then offer suggestions for dealing with it. The client may or may not need extra calcium, other exercises, or weight lifting.

DIF: Applying/Application REF: 1018
KEY: Musculoskeletal disorders| osteoporosis| psychosocial response| therapeutic communication| older adult
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

4. The nurse sees several clients with osteoporosis. For which client would bisphosphonates not be a good option?

a. Client with diabetes who has a serum creatinine of 0.8 mg/dL
b. Client who recently fell and has vertebral compression fractures
c. Hypertensive client who takes calcium channel blockers
d. Client with a spinal cord injury who cannot tolerate sitting up

ANS: D
Clients on bisphosphonates must be able to sit upright for 30 to 60 minutes after taking them. The client who cannot tolerate sitting up is not a good candidate for this class of drug. Poor renal function also makes clients bad candidates for this drug, but the client with a creatinine of 0.8 mg/dL is within normal range. Diabetes and hypertension are not related unless the client also has renal disease. The client who recently fell and sustained fractures is a good candidate for this drug if the fractures are related to osteoporosis.

DIF: Analyzing/Analysis REF: 1020
KEY: Musculoskeletal disorders| osteoporosis| bisphosphonates| adverse effects
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A client has been prescribed denosumab (Prolia). What instruction about this drug is most appropriate?
a. Drink at least 8 ounces of water with it.
b. Make appointments to come get your shot.
c. Sit upright for 30 to 60 minutes after taking it.
d. Take the drug on an empty stomach.

ANS: B
Denosumab is given by subcutaneous injection twice a year. The client does not need to drink 8 ounces of water with this medication as it is not taken orally. The client does not need to remain upright for 30 to 60 minutes after taking this medication, nor does the client need to take the drug on an empty stomach.

DIF: Understanding/Comprehension REF: 1021
KEY: Osteoporosis| musculoskeletal disorders| monoclonal antibodies
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A client in a nursing home refuses to take medications. She is at high risk for osteomalacia. What action by the nurse is best?
a. Ensure the client gets 15 minutes of sun exposure daily.
b. Give the client daily vitamin D injections.
c. Hide vitamin D supplements in favorite foods.
d. Plan to serve foods naturally high in vitamin D.

ANS: A
Sunlight is a good source of vitamin D, and the nursing staff can ensure some sun exposure each day. Vitamin D is not given by injection. Hiding the supplement in food is unethical. Very few foods are naturally high in vitamin D, but some are supplemented.

DIF: Applying/Application REF: 1023
KEY: Musculoskeletal disorders| ethics| nursing interventions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A client is in the internal medicine clinic reporting bone pain. The clients alkaline phosphatase level is 180 units/L. What action by the nurse is most appropriate?
a. Assess the client for leg bowing.
b. Facilitate an oncology workup.
c. Instruct the client on fluid restrictions.
d. Teach the client about ibuprofen (Motrin).

ANS: A
This client has manifestations of Pagets disease. The nurse should assess for other manifestations such as

bowing of the legs. Other care measures can be instituted once the client has a confirmed diagnosis.

DIF: Applying/Application REF: 1024
KEY: Musculoskeletal disorders| musculoskeletal assessment| nursing assessment| laboratory values MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. An older client with diabetes is admitted with a heavily draining leg wound. The clients white blood cell count is 38,000/mm3 but the client is afebrile. What action does the nurse take first?
a. Administer acetaminophen (Tylenol).
b. Educate the client on amputation.
c. Place the client on contact isolation.
d. Refer the client to the wound care nurse.

ANS: C
In the presence of a heavily draining wound, the nurse should place the client on contact isolation. If the client has discomfort, acetaminophen can be used, but this client has not reported pain and is afebrile. The client may or may not need an amputation in the future. The wound care nurse may be consulted, but not as the first action.

DIF: Applying/Application REF: 1027
KEY: Musculoskeletal disorders| Transmission-Based Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A nurse is caring for four clients. After the hand-off report, which client does the nurse see first?
a. Client with osteoporosis and a white blood cell count of 27,000/mm3
b. Client with osteoporosis and a bone fracture who requests pain medication
c. Post-microvascular bone transfer client whose distal leg is cool and pale
d. Client with suspected bone tumor who just returned from having a spinal CT

ANS: C
This client is the priority because the assessment findings indicate a critical lack of perfusion. A high white blood cell count is an expected finding for the client with osteoporosis. The client requesting pain medication should be seen second. The client who just returned from a CT scan is stable and needs no specific postprocedure care.

DIF: Analyzing/Analysis REF: 1027
KEY: Musculoskeletal disorders| nursing assessment| perfusion
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A client has a metastatic bone tumor. What action by the nurse takes priority?
a. Administer pain medication as prescribed.
b. Elevate the extremity and apply moist heat.
c. Handle the affected extremity with caution.
d. Place the client on protective precautions.

ANS: C
Bones invaded by tumors are very fragile and fracture easily. For client safety, the nurse handles the affected extremity with great care. Pain medication should be given to control pain. Elevation and heat may or may not be helpful. Protective precautions are not needed for this client.

DIF: Applying/Application REF: 1028
KEY: Musculoskeletal disorder| cancer| patient safety| injury prevention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. A hospitalized client is being treated for Ewings sarcoma. What action by the nurse is most important?

a. Assessing and treating the client for pain as needed
b. Educating the client on the disease and its treatment
c. Handling and disposing of chemotherapeutic agents per policy
d. Providing emotional support for the client and family

ANS: C
All actions are appropriate for this client. However, for safety, the nurse should place priority on proper handling and disposal of chemotherapeutic agents.

DIF: Applying/Application REF: 1029
KEY: Cancer| musculoskeletal disorders| hazardous materials| patient safety| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. A client with bone cancer is hospitalized for a limb salvage procedure. How can the nurse best address the clients psychosocial needs?
a. Assess the clients coping skills and support systems.
b. Explain that the surgery leads to a longer life expectancy.
c. Refer the client to the social worker or hospital chaplain.
d. Reinforce physical therapy to aid with ambulating normally.

ANS: A
The first step in the nursing process is assessment. The nurse should assess coping skills and possible support systems that will be helpful in this clients treatment. Explaining that a limb salvage procedure will extend life does not address the clients psychosocial needs. Referrals may be necessary, but the nurse should assess first. Reinforcing physical therapy is also helpful but again does not address the psychosocial needs of the client.

DIF: Applying/Application REF: 1031
KEY: Musculoskeletal disorders| psychosocial response| nursing assessment| coping
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

13. A client had a bunionectomy with osteotomy. The client asks why healing may take up to 3 months. What explanation by the nurse is best?
a. Your feet have less blood flow, so healing is slower.
b. The bones in your feet are hard to operate on.
c. The surrounding bones and tissue are damaged.
d. Your feet bear weight so they never really heal.

ANS: A
The feet are the most distal to the heart and receive less blood flow than other organs and tissues, prolonging the healing time after surgery. The other explanations are not correct.

DIF: Understanding/Comprehension REF: 1032
KEY: Musculoskeletal disorders| patient education| wound healing
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

14. A client has scoliosis with a 65-degree curve to the spine. What action by the nurse takes priority?
a. Allow the client to rest in a position of comfort.
b. Assess the clients cardiac and respiratory systems.
c. Assist the client with ambulating and position changes.
d. Position the client on one side propped with pillows.

ANS: B
This degree of curvature of the spine affects cardiac and respiratory function. The nurses priority is to assess those systems. Positioning is up to the client. The client may or may not need assistance with movement.

DIF: Applying/Application REF: 1033

KEY: Musculoskeletal system| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse sees clients in an osteoporosis clinic. Which client should the nurse see first?
a. Client taking calcium with vitamin D (Os-Cal) who reports flank pain 2 weeks ago
b. Client taking ibandronate (Boniva) who cannot remember when the last dose was
c. Client taking raloxifene (Evista) who reports unilateral calf swelling
d. Client taking risedronate (Actonel) who reports occasional dyspepsia

ANS: C
The client on raloxifene needs to be seen first because of the manifestations of deep vein thrombosis, which is an adverse effect of raloxifene. The client with flank pain may have had a kidney stone but is not acutely ill now. The client who cannot remember taking the last dose of ibandronate can be seen last. The client on risedronate may need to change medications.

DIF: Applying/Application REF: 1020
KEY: Musculoskeletal system| venous thromboembolism| adverse medication effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. What information does the nurse teach a womens group about osteoporosis?
a. For 5 years after menopause you lose 2% of bone mass yearly.
b. Men actually have higher rates of the disease but are underdiagnosed.
c. There is no way to prevent or slow osteoporosis after menopause.
d. Women and men have an equal chance of getting osteoporosis.

ANS: A
For the first 5 years after menopause, women lose about 2% of their bone mass each year. Men have a slower loss of bone after the age of 75. Many treatments are now available for women to slow osteoporosis after menopause.

DIF: Remembering/Knowledge REF: 1017
KEY: Musculoskeletal disorders| osteoporosis| older adult| gender differences
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

17. A client with osteoporosis is going home, where the client lives alone. What action by the nurse is best?
a. Arrange a home safety evaluation.
b. Ensure the client has a walker at home.
c. Help the client look into assisted living.
d. Refer the client to Meals on Wheels.

ANS: A
This client has several risk factors that place him or her at a high risk for falling. The nurse should consult social work or home health care to conduct a home safety evaluation. The other options may or may not be needed based upon the clients condition at discharge.

DIF: Applying/Application REF: 1035
KEY: Musculoskeletal disorders| osteoporosis| home safety| referrals
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A client is scheduled for a bone biopsy. What action by the nurse takes priority?
a. Administering the preoperative medications
b. Answering any questions about the procedure
c. Ensuring that informed consent is on the chart
d. Showing the clients family where to wait

ANS: C
The priority is to ensure that informed consent is on the chart. The preoperative medications should not be administered until the nurse is confident the procedure will occur and the client has already signed the consent, if the medications include anxiolytics or sedatives or opioids. The provider should answer questions about the procedure. The nurse does show the family where to wait, but this is not the priority and could be delegated.

DIF: Applying/Application REF: 1029
KEY: Musculoskeletal disorders| informed consent
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A client is admitted with a large draining wound on the leg. What action does the nurse take first?
a. Administer ordered antibiotics.
b. Insert an intravenous line.
c. Give pain medications if needed.
d. Obtain cultures of the leg wound.

ANS: D
The nurse first obtains wound cultures prior to administering broad-spectrum antibiotics. The nurse would need to start the IV prior to giving the antibiotics as they will most likely be parenteral. Pain should be treated but that is not the priority.

DIF: Applying/Application REF: 1027
KEY: Musculoskeletal disorders| cultures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

20. A client has an ingrown toenail. About what self-management measure does the nurse teach the client?
a. Long-term antibiotic use
b. Shoe padding
c. Toenail trimming
d. Warm moist soaks

ANS: D
Treatment of an ingrown toenail includes a podiatrist clipping away the ingrown part of the nail, warm moist soaks, and antibiotic ointment if needed. Antibiotics are not used long-term. Padding the shoes will not treat or prevent ingrown toenails. Clients should not attempt to trim ingrown nails themselves.

DIF: Understanding/Comprehension REF: 1033
KEY: Musculoskeletal disorders| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

MULTIPLE RESPONSE

1. A nurse is assessing a community group for dietary factors that contribute to osteoporosis. In addition to inquiring about calcium, the nurse also assesses for which other dietary components? (Select all that apply.)
a. Alcohol
b. Caffeine
c. Fat
d. Carbonated beverages
e. Vitamin D

ANS: A, B, D, E
Dietary components that affect the development of osteoporosis include alcohol, caffeine, high phosphorus intake, carbonated beverages, and vitamin D. Tobacco is also a contributing lifestyle factor. Fat intake does not contribute to osteoporosis.

DIF: Remembering/Knowledge REF: 1017

KEY: Musculoskeletal disorders| nutrition| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is providing education to a community womens group about lifestyle changes helpful in preventing osteoporosis. What topics does the nurse cover? (Select all that apply.)
a. Cut down on tobacco product use.
b. Limit alcohol to two drinks a day.
c. Strengthening exercises are important.
d. Take recommended calcium and vitamin D.
e. Walk 30 minutes at least 3 times a week.

ANS: C, D, E
Lifestyle changes can be made to decrease the occurrence of osteoporosis and include strengthening and weight-bearing exercises and getting the recommended amounts of both calcium and vitamin D. Tobacco should be totally avoided. Women should not have more than one drink per day.

DIF: Understanding/Comprehension REF: 1019
KEY: Musculoskeletal disorders| osteoporosis| primary prevention| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A client with Pagets disease is hospitalized for an unrelated issue. The client reports pain and it is not yet time for more medication. What comfort measures can the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Administering ibuprofen (Motrin)
b. Applying a heating pad
c. Providing a massage
d. Referring the client to a support group
e. Using a bed cradle to lift sheets off the feet

ANS: B, C
Comfort measures for Pagets disease include heat and massage. Administering medications and referrals are done by the nurse. A bed cradle is not necessary.

DIF: Applying/Application REF: 1025
KEY: Musculoskeletal disorders| delegation| nonpharmacologic comfort measures| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A client with chronic osteomyelitis is being discharged from the hospital. What information is important for the nurse to teach this client and family? (Select all that apply.)
a. Adherence to the antibiotic regimen
b. Correct intramuscular injection technique
c. Eating high-protein and high-carbohydrate foods
d. Keeping daily follow-up appointments
e. Proper use of the intravenous equipment

ANS: A, C, E
The client going home with chronic osteomyelitis will need long-term antibiotic therapyfirst intravenous, then oral. The client needs education on how to properly administer IV antibiotics, care for the IV line, adhere to the regimen, and eat a healthy diet to encourage wound healing. The antibiotics are not given by IM injection. The client does not need daily follow-up.

DIF: Applying/Application REF: 1027
KEY: Musculoskeletal disorders| patient education| medication administration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A client is admitted with a bone tumor. The nurse finds the client weak and lethargic with decreased deep tendon reflexes. What actions by the nurse are best? (Select all that apply.)
a. Assess the daily serum calcium level.
b. Consult the provider about a loop diuretic.
c. Institute seizure precautions for the client.
d. Instruct the client to call for help out of bed.
e. Place the client on a 1500-mL fluid restriction.

ANS: A, B, D
The client is exhibiting manifestations of possible hypercalcemia. This disorder is treated with increased fluids and loop diuretics. The nurse should assess the calcium level, consult with the provider, and instruct the client to call for help getting out of bed due to possible fractures and weakness. The client does not need seizure precautions or fluid restrictions.

DIF: Applying/Application REF: 1020
KEY: Musculoskeletal disorders| patient safety| laboratory values
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. The nurse is assessing a client for chronic osteomyelitis. Which features distinguish this from the acute form of the disease? (Select all that apply.)
a. Draining sinus tracts
b. High fevers
c. Presence of foot ulcers
d. Swelling and redness
e. Tenderness or pain

ANS: A, C
Draining sinus tracts and foot ulcers are seen in chronic osteomyelitis. High fever, swelling, and redness are more often seen in acute osteomyelitis. Pain or tenderness can be in either case.

DIF: Remembering/Knowledge REF: 1026
KEY: Musculoskeletal disorders| pain| wound healing| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. The nurse studying osteoporosis learns that which drugs can cause this disorder? (Select all that apply.)
a. Antianxiety agents
b. Antibiotics
c. Barbiturates
d. Corticosteroids
e. Loop diuretics

ANS: C, D, E
Several classes of drugs can cause secondary osteoporosis, including barbiturates, corticosteroids, and loop diuretics. Antianxiety agents and antibiotics are not associated with the formation of osteoporosis.

DIF: Remembering/Knowledge REF: 1016
KEY: Musculoskeletal system| musculoskeletal disorders| medication adverse effects
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A client is suspected to have muscular dystrophy. About what diagnostic testing does the nurse educate the client? (Select all that apply.)
a. Electromyography
b. Muscle biopsy
c. Nerve conduction studies
d. Serum aldolase
e. Serum creatinine kinase

ANS: A, B, D, E
Diagnostic testing for muscular dystrophy includes electromyography, muscle biopsy, serum aldolase and creatinine kinase levels. Nerve conduction is not related to this disorder.

DIF: Remembering/Knowledge REF: 1034
KEY: Musculoskeletal disorders| diagnostic tests| laboratory values
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 51: Care of Patients with Musculoskeletal Trauma

MULTIPLE CHOICE

1. A nurse assesses a client with a fracture who is being treated with skeletal traction. Which assessment should alert the nurse to urgently contact the health provider?
a. Blood pressure increases to 130/86 mm Hg
b. Traction weights are resting on the floor
c. Oozing of clear fluid is noted at the pin site
d. Capillary refill is less than 3 seconds

ANS: B
The immediate action of the nurse should be to reapply the weights to give traction to the fracture. The health care provider must be notified that the weights were lying on the floor, and the client should be realigned in bed. The clients blood pressure is slightly elevated; this could be related to pain and muscle spasms resulting from lack of pressure to reduce the fracture. Oozing of clear fluid is normal, as is the capillary refill time.

DIF: Applying/Application REF: 1040
KEY: Fracture| traction
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse coordinates care for a client with a wet plaster cast. Which statement should the nurse include when delegating care for this client to an unlicensed assistive personnel (UAP)?
a. Assess distal pulses for potential compartment syndrome.
b. Turn the client every 3 to 4 hours to promote cast drying.
c. Use a cloth-covered pillow to elevate the clients leg.
d. Handle the cast with your fingertips to prevent indentations.

ANS: C
When delegating care to a UAP for a client with a wet plaster cast, the UAP should be directed to ensure that the extremity is elevated on a cloth pillow instead of a plastic pillow to promote drying. The client should be assessed for impaired arterial circulation, a complication of compartment syndrome; however, the nurse should not delegate assessments to a UAP. The client should be turned every 1 to 2 hours to allow air to circulate and dry all parts of the cast. Providers should handle the cast with the palms of the hands to prevent indentations.

DIF: Applying/Application REF: 1039
KEY: Fracture| cast| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nurse obtains the health history of a client with a fractured femur. Which factor identified in the clients history should the nurse recognize as an aspect that may impede healing of the fracture?
a. Sedentary lifestyle
b. A 30pack-year smoking history
c. Prescribed oral contraceptives
d. Pagets disease

ANS: D
Pagets disease and bone cancer can cause pathologic fractures such as a fractured femur that do not achieve total healing. The other factors do not impede healing but may cause other health risks.

DIF: Understanding/Comprehension REF: 1036
KEY: Fracture| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. An emergency department nurse cares for a client who sustained a crush injury to the right lower leg. The client reports numbness and tingling in the affected leg. Which action should the nurse take first?

a. Assess the pedal pulses.
b. Apply oxygen by nasal cannula.
c. Increase the IV flow rate.
d. Loosen the traction.

ANS: A
These symptoms represent early warning signs of acute compartment syndrome. In acute compartment syndrome, sensory deficits such as paresthesias precede changes in vascular or motor signs. If the nurse finds a decrease in pedal pulses, the health care provider should be notified as soon as possible. Vital signs need to be obtained to determine if oxygen and intravenous fluids are necessary. Traction, if implemented, should never be loosened without a providers prescription.

DIF: Applying/Application REF: 1033
KEY: Fracture| compartment syndrome
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse assesses an older adult client who was admitted 2 days ago with a fractured hip. The nurse notes that the client is confused and restless. The clients vital signs are heart rate 98 beats/min, respiratory rate 32 breaths/min, blood pressure 132/78 mm Hg, and SpO2 88%. Which action should the nurse take first?
a. Administer oxygen via nasal cannula.
b. Re-position to a high-Fowlers position.
c. Increase the intravenous flow rate.
d. Assess response to pain medications.

ANS: A
The client is at high risk for a fat embolism and has some of the clinical manifestations of altered mental status and dyspnea. Although this is a life-threatening emergency, the nurse should take the time to administer oxygen first and then notify the health care provider. Oxygen administration can reduce the risk for cerebral damage from hypoxia. The nurse would not restrain a client who is confused without further assessment and orders. Sitting the client in a high-Fowlers position will not decrease hypoxia related to a fat embolism. The IV rate is not related. Pain medication most likely would not cause the client to be restless.

DIF: Applying/Application REF: 1034
KEY: Fracture| pulmonary embolism| respiratory distress/failure| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A trauma nurse cares for several clients with fractures. Which client should the nurse identify as at highest risk for developing deep vein thrombosis?
a. An 18-year-old male athlete with a fractured clavicle
b. A 36-year old female with type 2 diabetes and fractured ribs
c. A 55-year-old woman prescribed aspirin for rheumatoid arthritis
d. A 74-year-old man who smokes and has a fractured pelvis

ANS: D
Deep vein thrombosis (DVT) as a complication with bone fractures occurs more often when fractures are sustained in the lower extremities and the client has additional risk factors for thrombus formation. Other risk factors include obesity, smoking, oral contraceptives, previous thrombus events, advanced age, venous stasis, and heart disease. The other clients do not have risk factors for DVT.

DIF: Applying/Application REF: 1034
KEY: Fracture| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse delegates care of a client in traction to an unlicensed assistive personnel (UAP). Which statement should the nurse include when delegating hygiene care for this client?
a. Remove the traction when re-positioning the client.

b. Inspect the clients skin when performing a bed bath.
c. Provide pin care by using alcohol wipes to clean the sites.
d. Ensure that the weights remain freely hanging at all times.

ANS: D
Traction weights should be freely hanging at all times. They should not be lifted manually or allowed to rest on the floor. The client should remain in traction during hygiene activities. The nurse should assess the clients skin and provide pin and wound care for a client who is in traction; this should not be delegated to the UAP.

DIF: Applying/Application REF: 1040
KEY: Traction| fracture| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse notes crepitation when performing range-of-motion exercises on a client with a fractured left humerus. Which action should the nurse take next?
a. Immobilize the left arm.
b. Assess the clients distal pulse.
c. Monitor for signs of infection.
d. Administer prescribed steroids.

ANS: A
A grating sound heard when the affected part is moved is known as crepitation. This sound is created by bone fragments. Because bone fragments may be present, the nurse should immobilize the clients arm and tell the client not to move the arm. The grating sound does not indicate circulation impairment or infection. Steroids would not be indicated.

DIF: Applying/Application REF: 1038
KEY: Fracture| range of motion
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. A nurse reviews prescriptions for an 82-year-old client with a fractured left hip. Which prescription should alert the nurse to contact the provider and express concerns for client safety?
a. Meperidine (Demerol) 50 mg IV every 4 hours
b. Patient-controlled analgesia (PCA) with morphine sulfate
c. Percocet 2 tablets orally every 6 hours PRN for pain
d. Ibuprofen elixir every 8 hours for first 2 days

ANS: A
Meperidine (Demerol) should not be used for older adults because it has toxic metabolites that can cause seizures. The nurse should question this prescription. The other prescriptions are appropriate for this clients pain management.

DIF: Understanding/Comprehension REF: 1041
KEY: Fracture| medication safety| opioid| pharmacologic pain management| older adult
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A nurse is caring for a client who is recovering from an above-the-knee amputation. The client reports pain in the limb that was removed. How should the nurse respond?
a. The pain you are feeling does not actually exist.
b. This type of pain is common and will eventually go away.
c. Would you like to learn how to use imagery to minimize your pain?
d. How would you describe the pain that you are feeling?

ANS: D
The nurse should ask the client to rate the pain on a scale of 0 to 10 and describe how the pain feels. Although phantom limb pain is common, the nurse should not minimize the pain that the client is experiencing by stating

that it does not exist or will eventually go away. Antiepileptic drugs and antispasmodics are used to treat neurologic pain and muscle spasms after amputation. Although imagery may assist the client, the nurse must assess the clients pain before determining the best action.

DIF: Applying/Application REF: 1051
KEY: Amputation| pain assessment MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

11. A home health nurse assesses a client with diabetes who has a new cast on the arm. The nurse notes the clients fingers are pale, cool, and slightly swollen. Which action should the nurse take first?
a. Raise the arm above the level of the heart.
b. Encourage range of motion.
c. Apply heat to the affected hand.
d. Bivalve the cast to decrease pressure.

ANS: A
Arm casts can impair circulation when the arm is in the dependent position. The nurse should immediately elevate the arm above the level of the heart, ensuring that the hand is above the elbow, and should re-assess the extremity in 15 minutes. If the fingers are warmer and less swollen, the cast is not too tight and adjustments do not need to be made, but a sling should be worn when the client is upright. Encouraging range of motion would not assist the client as much as elevating the arm. Heat would cause increased edema and should not be used. If the cast is confirmed to be too tight, it could be bivalved.

DIF: Applying/Application REF: 1039
KEY: Fracture| cast| compartment syndrome
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12. A nurse cares for a client who had a wrist cast applied 3 days ago. The client states, The cast is loose enough to slide off. How should the nurse respond?
a. Keep your arm above the level of your heart.
b. As your muscles atrophy, the cast is expected to loosen.
c. I will wrap a bandage around the cast to prevent it from slipping.
d. You need a new cast now that the swelling is decreased.

ANS: D
Often the surrounding soft tissues may be swollen considerably when the cast is initially applied. After the swelling has resolved, if the cast is loose enough to permit two or more fingers between the cast and the clients skin, the cast needs to be replaced. Elevating the arm will not solve the problem, and the clients muscles should not atrophy while in a cast for 6 weeks or less. An elastic bandage will not prevent slippage of the cast.

DIF: Understanding/Comprehension REF: 1039
KEY: Fracture| cast| patient education
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. A nurse assesses a client with a pelvic fracture. Which assessment finding should the nurse identify as a complication of this injury?
a. Hypertension
b. Constipation
c. Infection
d. Hematuria

ANS: D
The pelvis is very vascular and close to major organs. Injury to the pelvis can cause integral damage that may manifest as blood in the urine (hematuria) or stool. The nurse should also assess for signs of hemorrhage and hypovolemic shock, which include hypotension and tachycardia. Constipation and infection are not complications of a pelvic fracture.

DIF: Applying/Application REF: 1049
KEY: Fracture| shock
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

14. A nurse cares for a client placed in skeletal traction. The client asks, What is the primary purpose of this type of traction? How should the nurse respond?
a. Skeletal traction will assist in realigning your fractured bone.
b. This treatment will prevent future complications and back pain.
c. Traction decreases muscle spasms that occur with a fracture.
d. This type of traction minimizes damage as a result of fracture treatment.

ANS: A
Skeletal traction pins or screws are surgically inserted into the bone to aid in bone alignment. As a last resort, traction can be used to relieve pain, decrease muscle spasm, and prevent or correct deformity and tissue damage. These are not primary purposes of skeletal traction.

DIF: Understanding/Comprehension REF: 1040
KEY: Fracture| traction| patient education
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

15. A nurse cares for a client in skeletal traction. The nurse notes that the skin around the clients pin sites is swollen, red, and crusty with dried drainage. Which action should the nurse take next?
a. Request a prescription to decrease the traction weight.
b. Apply an antibiotic ointment and a clean dressing.
c. Cleanse the area, scrubbing off the crusty areas.
d. Obtain a prescription to culture the drainage.

ANS: D
These clinical manifestations indicate inflammation and possible infection. Infected pin sites can lead to osteomyelitis and should be treated immediately. The nurse should obtain a culture and assess vital signs. The provider should be notified. By decreasing the traction weight, applying a new dressing, or cleansing the area, the infection cannot be significantly treated.

DIF: Applying/Application REF: 1040
KEY: Fracture| traction| infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

16. A nurse cares for a client recovering from an above-the-knee amputation of the right leg. The client reports pain in the right foot. Which prescribed medication should the nurse administer first?
a. Intravenous morphine
b. Oral acetaminophen
c. Intravenous calcitonin
d. Oral ibuprofen

ANS: C
The client is experiencing phantom limb pain, which usually manifests as intense burning, crushing, or cramping. IV infusions of calcitonin during the week after amputation can reduce phantom limb pain. Opioid analgesics such as morphine are not as effective for phantom limb pain as they are for residual limb pain. Oral acetaminophen and ibuprofen are not used in treating phantom limb pain.

DIF: Applying/Application REF: 1052
KEY: Amputation| pharmacologic pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

17. A nurse plans care for a client who is recovering from a below-the-knee amputation of the left leg. Which

intervention should the nurse include in this clients plan of care?
a. Place pillows between the clients knees.
b. Encourage range-of-motion exercises.
c. Administer prophylactic antibiotics.
d. Implement strict bedrest in a supine position.

ANS: B
Clients with a below-the-knee amputation should complete range-of-motion exercises to prevent flexion contractions and prepare for a prosthesis. A pillow may be used under the limb as support. Clients recovering from this type of amputation are at low risk for infection and should not be prescribed prophylactic antibiotics. The client should be encouraged to re-position, move, and exercise frequently, and therefore should not be restricted to bedrest.

DIF: Applying/Application REF: 1053
KEY: Amputation| range of motion
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

18. An emergency department nurse triages a client with diabetes mellitus who has fractured her arm. Which action should the nurse take first?
a. Remove the medical alert bracelet from the fractured arm.
b. Immobilize the arm by splinting the fractured site.
c. Place the client in a supine position with a warm blanket.
d. Cover any open areas with a sterile dressing.

ANS: A
A clients medical alert bracelet should be removed from the fractured arm before the affected extremity swells. Immobilization, positioning, and dressing should occur after the bracelet is removed.

DIF: Applying/Application REF: 1038
KEY: Fracture| diabetes mellitus| patient safety
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

19. A nurse assesses a client with a rotator cuff injury. Which finding should the nurse expect to assess?
a. Inability to maintain adduction of the affected arm for more than 30 seconds
b. Shoulder pain that is relieved with overhead stretches and at night
c. Inability to initiate or maintain abduction of the affected arm at the shoulder
d. Referred pain to the shoulder and arm opposite the affected shoulder

ANS: C
Clients with a rotator cuff tear are unable to initiate or maintain abduction of the affected arm at the shoulder. This is known as the drop arm test. The client should not have difficulty with adduction of the arm, nor experience referred pain to the opposite shoulder. Pain is usually more intense at night and with overhead activities.

DIF: Understanding/Comprehension REF: 1059
KEY: Musculoskeletal injury
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

20. A nurse cares for a client with a fractured fibula. Which assessment should alert the nurse to take immediate action?
a. Pain of 4 on a scale of 0 to 10
b. Numbness in the extremity
c. Swollen extremity at the injury site
d. Feeling cold while lying in bed

ANS: B

The client with numbness and/or tingling of the extremity may be displaying the first signs of acute compartment syndrome. This is an acute problem that requires immediate intervention because of possible decreased circulation. Moderate pain and swelling is an expected assessment after a fracture. These findings can be treated with comfort measures. Being cold can be treated with additional blankets or by increasing the temperature of the room.

DIF: Understanding/Comprehension REF: 1044
KEY: Fracture| compartment syndrome
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

21. After teaching a client with a fractured humerus, the nurse assesses the clients understanding. Which dietary choice demonstrates that the client correctly understands the nutrition needed to assist in healing the fracture?
a. Baked fish with orange juice and a vitamin D supplement
b. Bacon, lettuce, and tomato sandwich with a vitamin B supplement
c. Vegetable lasagna with a green salad and a vitamin A supplement
d. Roast beef with low-fat milk and a vitamin C supplement

ANS: D
The client with a healing fracture needs supplements of vitamins B and C and a high-protein, high-calorie diet. Milk for calcium supplementation and vitamin C supplementation are appropriate. Meat would increase protein in the diet that is necessary for bone healing. Fish, a sandwich, and vegetable lasagna would provide less protein.

DIF: Applying/Application REF: 1045
KEY: Fracture| nutritional requirements MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

22. A nurse cares for an older adult client with multiple fractures. Which action should the nurse take to manage this clients pain?
a. Meperidine (Demerol) injections every 4 hours around the clock
b. Patient-controlled analgesia (PCA) pump with morphine
c. Ibuprofen (Motrin) 600 mg orally every 4 hours PRN for pain
d. Morphine 4 mg intravenous push every 2 hours PRN for pain

ANS: B
The older adult client should never be treated with meperidine because toxic metabolites can cause seizures. The client should be managed with a PCA pump to control pain best. Motrin most likely would not provide complete pain relief with multiple fractures. IV morphine PRN would not control pain as well as a pump that the client can control.

DIF: Applying/Application REF: 1048
KEY: Fracture| pharmacologic pain management| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

23. A phone triage nurse speaks with a client who has an arm cast. The client states, My arm feels really tight and puffy. How should the nurse respond?
a. Elevate your arm on two pillows and get ice to apply to the cast.
b. Continue to take ibuprofen (Motrin) until the swelling subsides.
c. This is normal. A new cast will often feel a little tight for the first few days.
d. Please come to the clinic today to have your arm checked by the provider.

ANS: D
Puffy fingers and a feeling of tightness from the cast may indicate the development of compartment syndrome. The client should come to the clinic that day to be evaluated by the provider because delay of treatment can cause permanent damage to the extremity. Ice and ibuprofen are acceptable actions, but checking the cast is the priority because it ensures client safety. The nurse should not reassure the client that this is normal.

DIF: Applying/Application REF: 1034
KEY: Fracture| cast| compartment syndrome
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

24. A nurse cares for a client who had a long-leg cast applied last week. The client states, I cannot seem to catch my breath and I feel a bit light-headed. Which action should the nurse take next?
a. Auscultate the clients lung fields anteriorly and posteriorly.
b. Administer oxygen to keep saturations greater than 92%.
c. Check the clients blood glucose level.
d. Ask the client to take deep breaths.

ANS: B
The clients symptoms are consistent with the development of pulmonary embolism caused by leg immobility in the long cast. The nurse should check the clients pulse oximetry reading and provide oxygen to keep saturations greater than 92%. Auscultating lung fields, checking blood glucose level, or deep breathing will not assist this client.

DIF: Applying/Application REF: 1035
KEY: Fracture| cast| pulmonary embolism| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

25. A nurse cares for an older adult client who is recovering from a leg amputation surgery. The client states, I dont want to live with only one leg. I should have died during the surgery. How should the nurse respond?
a. Your vital signs are good, and you are doing just fine right now.
b. Your children are waiting outside. Do you want them to grow up without a father?
c. This is a big change for you. What support system do you have to help you cope?
d. You will be able to do some of the same things as before you became disabled.

ANS: C
The client feels like less of a person following the amputation. The nurse should help the client to identify coping mechanisms that have worked in the past and current support systems to assist the client with coping. The nurse should not ignore the clients feelings by focusing on vital signs. The nurse should not try to make the client feel guilty by alluding to family members. The nurse should not refer to the client as being disabled as this labels the client and may fuel the clients poor body image.

DIF: Applying/Application REF: 1053
KEY: Amputation| coping| older adult MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

26. After teaching a client who is recovering from a vertebroplasty, the nurse assesses the clients understanding. Which statement by the client indicates a need for additional teaching?
a. I can drive myself home after the procedure.
b. I will monitor the puncture site for signs of infection.
c. I can start walking tomorrow and increase my activity slowly.
d. I will remove the dressing the day after discharge.

ANS: A
Before discharge, a client who has a vertebroplasty should be taught to avoid driving or operating machinery for the first 24 hours. The client should monitor the puncture site for signs of infection. Usual activities can resume slowly, including walking and slowly increasing activity over the next few days. The client should keep the dressing dry and remove it the next day.

DIF: Remembering/Knowledge REF: 1050
KEY: Musculoskeletal injury| patient education| postoperative nursing
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

27. A nurse plans care for a client who is prescribed skeletal traction. Which intervention should the nurse include in this plan of care to decrease the clients risk for infection?
a. Wash the traction lines and sockets once a day.
b. Release traction tension for 30 minutes twice a day.
c. Do not place the traction weights on the floor.
d. Schedule for pin care to be provided every shift.

ANS: D
To decrease the risk for infection in a client with skeletal traction of external fixation, the nurse should provide routine pin care and assess manifestations of infection at the pin sites every shift. The traction lines and sockets are external and do not come in contact with the clients skin; these do not need to be washed. Although traction weights should not be removed or released for any period of time without a prescription, or placed on the floor, this does not decrease the risk for infection.

DIF: Applying/Application REF: 1042
KEY: Fracture| traction| infection
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. A nurse teaches a client with a fractured tibia about external fixation. Which advantages of external fixation for the immobilization of fractures should the nurse share with the client? (Select all that apply.)
a. It leads to minimal blood loss.
b. It allows for early ambulation.
c. It decreases the risk of infection.
d. It increases blood supply to tissues.
e. It promotes healing.

ANS: A, B, E
External fixation is a system in which pins or wires are inserted through the skin and bone and then connected to a ridged external frame. With external fixation, blood loss is less than with internal fixation, but the risk for infection is much higher. The device allows early ambulation and exercise, maintains alignment, stabilizes the fracture site, and promotes healing. The device does not increase blood supply to the tissues. The nurse should assess for distal circulation, movement, and sensation, which can be disturbed by fracture injuries and treatments.

DIF: Understanding/Comprehension REF: 1042
KEY: Fracture| fixation
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. An emergency nurse assesses a client who is admitted with a pelvic fracture. Which assessments should the nurse monitor to prevent a complication of this injury? (Select all that apply.)
a. Temperature
b. Urinary output
c. Blood pressure
d. Pupil reaction
e. Skin color

ANS: B, C, E
With a pelvic fracture, internal organ damage may result in bleeding and hypovolemic shock. The nurse monitors the clients heart rate, blood pressure, urine output, skin color, and level of consciousness frequently to determine whether shock is manifesting. It is important to monitor the urine for blood to assess whether the urinary system has been damaged with the pelvic fracture. Changes in temperature and pupil reactions are not directly associated with hypovolemic shock. Temperature changes are usually associated with hypo- or hyperthermia or infectious processes. Pupillary changes occur with brain injuries, bleeds, or neurovascular accidents.

DIF: Applying/Application REF: 1049
KEY: Fracture| shock
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse cares for a client with a fracture injury. Twenty minutes after an opioid pain medication is administered, the client reports pain in the site of the fracture. Which actions should the nurse take? (Select all that apply.)
a. Administer additional opioids as prescribed.
b. Elevate the extremity on pillows.
c. Apply ice to the fracture site.
d. Place a heating pad at the site of the injury.
e. Keep the extremity in a dependent position.

ANS: A, B, C
The client with a new fracture likely has edema; elevating the extremity and applying ice probably will help in decreasing pain. Administration of an additional opioid within the dosage guidelines may be ordered. Heat will increase edema and may increase pain. Dependent positioning will also increase edema.

DIF: Applying/Application REF: 1039
KEY: Fracture| complementary and alternative medication| nonpharmacologic pain management MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A nurse plans care for a client who is recovering from open reduction and internal fixation (ORIF) surgery for a right hip fracture. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Elevate heels off the bed with a pillow.
b. Ambulate the client on the first postoperative day.
c. Push the clients patient-controlled analgesia button.
d. Re-position the client every 2 hours.
e. Use pillows to encourage subluxation of the hip.

ANS: A, B, D
Postoperative care for a client who has ORIF of the hip includes elevating the clients heels off the bed and re-positioning every 2 hours to prevent pressure and skin breakdown. It also includes ambulating the client on the first postoperative day, and using pillows or an abduction pillow to prevent subluxation of the hip. The nurse should teach the client to use the patient-controlled analgesia pump, but the nurse should never push the button for the client.

DIF: Applying/Application REF: 1042
KEY: Fracture| fixation| postoperative nursing
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A nurse assesses a client with a cast for potential compartment syndrome. Which clinical manifestations are correctly paired with the physiologic changes of compartment syndrome? (Select all that apply.)
a. Edema Increased capillary permeability
b. Pallor Increased blood blow to the area
c. Unequal pulses Increased production of lactic acid
d. Cyanosis Anaerobic metabolism
e. Tingling A release of histamine

ANS: A, C, D
Clinical manifestations of compartment syndrome are caused by several physiologic changes. Edema is caused by increased capillary permeability, release of histamine, decreased tissue perfusion, and vasodilation. Unequal pulses are caused by an increased production of lactic acid. Cyanosis is caused by anaerobic metabolism. Pallor is caused by decreased oxygen to tissues, and tingling is caused by increased tissue pressure.

DIF: Remembering/Knowledge REF: 1034
KEY: Fracture| cast| compartment syndrome
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse teaches a client who is at risk for carpal tunnel syndrome. Which health promotion activities should the nurse include in this clients teaching? (Select all that apply.)
a. Frequently assess the ergonomics of the equipment being used.
b. Take breaks to stretch fingers and wrists during working hours.
c. Do not participate in activities that require repetitive actions.
d. Take ibuprofen (Motrin) to decrease pain and swelling in wrists.
e. Adjust chair height to allow for good posture.

ANS: A, B, E
Health promotion activities to prevent carpal tunnel syndrome include assessing the ergonomics of the equipment being used, taking breaks to stretch fingers and wrists during working hours, and adjusting chair height to allow for good posture. The client should be allowed to participate in activities that require repetitive actions as long as precautions are taken to promote health. Pain medications are not part of health promotion activities.

DIF: Understanding/Comprehension REF: 1057
KEY: Musculoskeletal injury| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

7. A nurse teaches a client about prosthesis care after amputation. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. The device has been custom made specifically for you.
b. Your prosthetic is good for work but not for exercising.
c. A prosthetist will clean your inserts for you each month.
d. Make sure that you wear the correct liners with your prosthetic.
e. I have scheduled a follow-up appointment for you.

ANS: A, D, E
A client with a new prosthetic should be taught that the prosthetic device is custom made for the client, taking into account the clients level of amputation, lifestyle (including exercise preferences), and occupation. In collaboration with a prosthetist, the client should be taught proper techniques for cleansing the sockets and inserts, wearing the correct liners, and assessing shoe wear. Follow-up care and appointments are important for ongoing assessment.

DIF: Applying/Application REF: 1055
KEY: Amputation| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 52: Assessment of the Gastrointestinal System

MULTIPLE CHOICE

1. The student nurse studying the gastrointestinal system understands that chyme refers to what?
a. Hormones that reduce gastric acidity
b. Liquefied food ready for digestion
c. Nutrients after being absorbed
d. Secretions that help digest food

ANS: B
Before being digested, food must be broken down into a liquid form. This liquid is called chyme. Secretin is the hormone that inhibits acid production and decreases gastric motility. Absorption is carried out as the nutrients produced by digestion move from the lumen of the GI tract into the bodys circulatory system for uptake by individual cells. The secretions that help digest food include hydrochloric acid, bile, and digestive enzymes.

DIF: Remembering/Knowledge REF: 1062
KEY: Gastrointestinal system MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A client scheduled for a percutaneous transhepatic cholangiography (PTC) denies allergies to medication. What action by the nurse is best?
a. Ask the client about shellfish allergies.
b. Document this information on the chart.
c. Ensure that the client has a ride home.
d. Instruct the client on bowel preparation.

ANS: A
PTC uses iodinated dye, so the client should be asked about seafood allergies, specifically to shellfish. Documentation should occur, but this is not the priority. The client will need a ride home afterward if the procedure is done on an outpatient basis. There is no bowel preparation for PTC.

DIF: Applying/Application REF: 1070
KEY: Gastrointestinal system| gastrointestinal assessment| allergies| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A client is having an esophagogastroduodenoscopy (EGD) and has been given midazolam hydrochloride (Versed). The clients respiratory rate is 8 breaths/min. What action by the nurse is best?
a. Administer naloxone (Narcan).
b. Call the Rapid Response Team.
c. Provide physical stimulation.
d. Ventilate with a bag-valve-mask.

ANS: C
For an EGD, clients are given mild sedation but should still be able to follow commands. For shallow or slow respirations after the sedation is given, the nurses first action is to provide a physical stimulation such as a sternal rub and directions to breathe deeply. Naloxone is not the antidote for Versed. The Rapid Response Team is not needed at this point. The client does not need manual ventilation.

DIF: Applying/Application REF: 1071
KEY: Gastrointestinal system| medication side effects| nursing implementation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A client is scheduled for a colonoscopy and the nurse has provided instructions on the bowel cleansing regimen. What statement by the client indicates a need for further teaching?
a. Its a good thing I love orange and cherry gelatin.

b. My spouse will be here to drive me home.
c. I should refrigerate the GoLYTELY before use.
d. I will buy a case of Gatorade before the prep.

ANS: A
The client should be advised to avoid beverages and gelatin that are red, orange, or purple in color as their residue can appear to be blood. The other statements show a good understanding of the preparation for the procedure.

DIF: Evaluating/Synthesis REF: 1072
KEY: Gastrointestinal system| gastrointestinal assessment| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A client had a colonoscopy and biopsy yesterday and calls the gastrointestinal clinic to report a spot of bright red blood on the toilet paper today. What response by the nurse is best?
a. Ask the client to call back if this happens again today.
b. Instruct the client to go to the emergency department.
c. Remind the client that a small amount of bleeding is possible.
d. Tell the client to come in to the clinic this afternoon.

ANS: C
After a colonoscopy with biopsy, a small amount of bleeding is normal. The nurse should remind the client of this and instruct him or her to go to the emergency department for large amounts of bleeding, severe pain, or dizziness.

DIF: Understanding/Comprehension REF: 1073
KEY: Gastrointestinal system| gastrointestinal assessment| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. An older client has had an instance of drug toxicity and asks why this happens, since the client has been on this medication for years at the same dose. What response by the nurse is best?
a. Changes in your liver cause drugs to be metabolized differently.
b. Perhaps you dont need as high a dose of the drug as before.
c. Stomach muscles atrophy with age and you digest more slowly.
d. Your body probably cant tolerate as much medication anymore.

ANS: A
Decreased liver enzyme activity depresses drug metabolism, which leads to accumulation of drugspossibly to toxic levels. The other options do not accurately explain this age-related change.

DIF: Understanding/Comprehension REF: 1065
KEY: Gastrointestinal system| older adult| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

7. To promote comfort after a colonoscopy, in what position does the nurse place the client?
a. Left lateral
b. Prone
c. Right lateral
d. Supine

ANS: A
After colonoscopy, clients have less discomfort and quicker passage of flatus when placed in the left lateral position.

DIF: Remembering/Knowledge REF: 1073
KEY: Gastrointestinal system| positioning| nonpharmacologic comfort measures

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A nurse is examining a client reporting right upper quadrant (RUQ) abdominal pain. What technique should the nurse use to assess this clients abdomen?
a. Auscultate after palpating.
b. Avoid any palpation.
c. Palpate the RUQ first.
d. Palpate the RUQ last.

ANS: D
If pain is present in a certain area of the abdomen, that area should be palpated last to keep the client from tensing up, which could possibly affect the rest of the examination. Auscultation of the abdomen occurs prior to palpation.

DIF: Remembering/Knowledge REF: 1066
KEY: Gastrointestinal system| gastrointestinal assessment| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A client presents to the emergency department reporting severe abdominal pain. On assessment, the nurse finds a bulging, pulsating mass in the abdomen. What action by the nurse is the priority?
a. Auscultate for bowel sounds.
b. Notify the provider immediately.
c. Order an abdominal flat-plate x-ray.
d. Palpate the mass and measure its size.

ANS: B
This observation could indicate an abdominal aortic aneurysm, which could be life threatening and should never be palpated. The nurse notifies the provider at once. An x-ray may be indicated. Auscultation is part of assessment, but the nurses priority action is to notify the provider.

DIF: Remembering/Knowledge REF: 1067
KEY: Gastrointestinal system| gastrointestinal assessment| nursing assessment| communication MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A client presents to the family practice clinic reporting a week of watery, somewhat bloody diarrhea. The nurse assists the client to obtain a stool sample. What action by the nurse is most important?
a. Ask the client about recent exposure to illness.
b. Assess the clients stool for obvious food particles.
c. Include the date and time on the specimen container.
d. Put on gloves prior to collecting the sample.

ANS: D
To avoid possible exposure to infectious agents, the nurse dons gloves prior to handling any bodily secretions. Recent exposure to illness is not related to collecting a stool sample. The nurse can visually inspect the stool for food particles, but it still needs analysis in the laboratory. The container should be dated and timed, but safety for the staff and other clients comes first.

DIF: Applying/Application REF: 1068
KEY: Gastrointestinal system| Standard Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A client who has been taking antibiotics reports severe, watery diarrhea. About which test does the nurse teach the client?
a. Colonoscopy
b. Enzyme-linked immunosorbent assay (ELISA) toxin A+B

c. Ova and parasites
d. Stool culture

ANS: B
Clients taking antibiotics are at risk for Clostridium difficile infection. The most common test for this disorder is a stool sample for ELISA toxin A+B. Colonoscopy, ova and parasites, and stool culture are not warranted at this time.

DIF: Understanding/Comprehension REF: 1070
KEY: Gastrointestinal system| gastrointestinal assessment| diagnostic testing| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12. The nurse knows that a client with prolonged prothrombin time (PT) values (not related to medication) probably has dysfunction in which organ?
a. Kidneys
b. Liver
c. Spleen
d. Stomach

ANS: B
Severe acute or chronic liver damage leads to a prolonged PT secondary to impaired synthesis of clotting proteins. The other organs are not related to this issue.

DIF: Remembering/Knowledge REF: 1068
KEY: Gastrointestinal system| laboratory values| pathophysiology
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. A client is recovering from an esophagogastroduodenoscopy (EGD) and requests something to drink. What action by the nurse is best?
a. Allow the client cool liquids only.
b. Assess the clients gag reflex.
c. Remind the client to remain NPO.
d. Tell the client to wait 4 hours.

ANS: B
The local anesthetic used during this procedure will depress the clients gag reflex. After the procedure, the nurse should ensure that the gag reflex is intact before offering food or fluids. The client does not need to be restricted to cool beverages only and is not required to wait 4 hours before oral intake is allowed. Telling the client to remain NPO does not inform the client of when he or she can have fluids, nor does it reflect the clients readiness for them.

DIF: Understanding/Comprehension REF: 1071
KEY: Gastrointestinal assessment| diagnostic testing| patient safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. The nurse is aware of the 2014 American Cancer Society Screening Guidelines for colon cancer, which include which testing modalities for people over the age of 50? (Select all that apply.)
a. Colonoscopy every 10 years
b. Colonoscopy every 5 years
c. Computed tomography (CT) colonography every 5 years
d. Double-contrast barium enema every 10 years
e. Flexible sigmoidoscopy every 10 years

ANS: A, C

The options for colon cancer screening for people over the age of 50 include colonoscopy every 10 years and CT colonography, double-contrast barium enema, or flexible sigmoidoscopy every 5 years.

DIF: Remembering/Knowledge REF: 1070
KEY: Gastrointestinal system| gastrointestinal assessment| cancer| health promotion
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

2. A client had an endoscopic retrograde cholangiopancreatography (ERCP). The nurse instructs the client and family about the signs of potential complications, which include what problems? (Select all that apply.)
a. Cholangitis
b. Pancreatitis
c. Perforation
d. Renal lithiasis
e. Sepsis

ANS: A, B, C, E
Possible complications after an ERCP include cholangitis, pancreatitis, perforation, sepsis, and bleeding. Kidney stones are not a complication of ERCP.

DIF: Understanding/Comprehension REF: 1072
KEY: Gastrointestinal system| diagnostic testing| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. The nurse working with older clients understands age-related changes in the gastrointestinal system. Which changes does this include? (Select all that apply.)
a. Decreased hydrochloric acid production
b. Diminished sensation that can lead to constipation
c. Fat not digested as well in older adults
d. Increased peristalsis in the large intestine
e. Pancreatic vessels become calcified

ANS: A, B, C, E
Several age-related changes occur in the gastrointestinal system. These include decreased hydrochloric acid production, diminished nerve function that leads to decreased sensation of the need to pass stool, decreased fat digestion, decreased peristalsis in the large intestine, and calcification of pancreatic vessels.

DIF: Remembering/Knowledge REF: 1065
KEY: Gastrointestinal system| older adult
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. The nurse working in the gastrointestinal clinic sees clients who are anemic. What are common causes for which the nurse assesses in these clients? (Select all that apply.)
a. Colon cancer
b. Diverticulitis
c. Inflammatory bowel disease
d. Peptic ulcer disease
e. Pernicious anemia

ANS: A, B, C, D
In adults, the most common cause of anemia is GI bleeding. This is commonly associated with colon cancer, diverticulitis, inflammatory bowel disease, and peptic ulcer disease. Pernicious anemia is not associated with GI bleeding.

DIF: Remembering/Knowledge REF: 1068
KEY: Gastrointestinal system| laboratory values| gastrointestinal assessment
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. The nurse working with clients who have gastrointestinal problems knows that which laboratory values are related to what organ dysfunctions? (Select all that apply.)
a. Alanine aminotransferase: biliary system
b. Ammonia: liver
c. Amylase: liver
d. Lipase: pancreas
e. Urine urobilinogen: stomach

ANS: B, D
Alanine aminotransferase and ammonia are related to the liver. Amylase and lipase are related to the pancreas. Urobilinogen evaluates both hepatic and biliary function.

DIF: Remembering/Knowledge REF: 1068
KEY: Gastrointestinal system| gastrointestinal assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 53: Care of Patients with Oral Cavity Problems

MULTIPLE CHOICE

1. A student nurse is providing care to an older client with stomatitis and dysphagia. What action by the student nurse requires the registered nurse to intervene?
a. Assisting the client to perform oral care every 2 hours
b. Preparing to administer a viscous lidocaine gargle
c. Reminding the client not to swallow nystatin (Mycostatin)
d. Teaching the client to use a soft-bristled toothbrush

ANS: B
Viscous lidocaine gargles or mouthwashes are sometimes prescribed for clients with stomatitis and pain. However, the numbing effect can lead to choking or mouth burns from hot food. This client already has difficulty swallowing, so this medication is not appropriate. Therefore, the nurse should intervene when the student prepares to administer this preparation. The other options are correct actions.

DIF: Applying/Application REF: 1078
KEY: Oral disorders| topical anesthetics| fungal infections
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A client has a large oral tumor. What assessment by the nurse takes priority?
a. Airway
b. Breathing
c. Circulation
d. Nutrition

ANS: A
Airway always takes priority. Airway must be assessed first and any problems resolved if present.

DIF: Applying/Application REF: 1080
KEY: Oral disorders| cancer| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A female client hospitalized for an unrelated problem has a large pearly-white lesion on her lip, to which she continues to apply lipstick that she will not remove for inspection. The client refuses to discuss the lesion with the nurse or health care provider. What action by the nurse is best?
a. Ask the client why her appearance is so important.
b. Ignore the lesion since the client will not discuss it.
c. Inform the client that early-stage cancer is curable.
d. Work with the client to establish a trusting relationship.

ANS: D
Clients with oral cancers often have body image difficulties due to the location of the tumor or the results of surgical treatment. This client appears to be using denial to cope with this problem. The nurse should work to establish a helping-trusting relationship in hopes that the client will be amenable to future discussions about the lesion. Asking why questions often puts people on the defensive and should be avoided. Ignoring the lesion is not being an advocate for the client. Education is important, but right now the client is in denial, so this information will not seem relevant to her.

DIF: Applying/Application REF: 1079
KEY: Oral disorders| psychosocial response| coping| communication
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

4. A nurse has conducted a community screening event for oral cancer. What client is the highest priority for referral to a dentist?

a. Client who has poor oral hygiene practices
b. Client who smokes and drinks daily
c. Client who tans for an upcoming vacation
d. Client who occasionally uses illicit drugs

ANS: B
Smoking and alcohol exposure create a high risk for this client. Poor oral hygiene is not related to the etiology of cancer but may cause a tumor to go unnoticed. Tanning is a risk factor, but short-term exposure does not have the same risk as daily exposure to tobacco and alcohol. Illicit drugs are not related to oral cancers.

DIF: Understanding/Comprehension REF: 1079
KEY: Oral disorders| health screening| primary prevention| nursing assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Health Promotion and Maintenance

5. The nurse reads a clients chart and sees that the health care provider assessed mucosal erythroplasia. What should the nurse understand that this means for the client?
a. Early sign of oral cancer
b. Fungal mouth infection
c. Inflammation of the gums
d. Obvious oral tumor

ANS: A
Mucosal erythroplasia is the earliest sign of oral cancer. It is not a fungal infection, inflammation of the gums, or an obvious tumor.

DIF: Remembering/Knowledge REF: 1078
KEY: Oral disorders| cancer| pathophysiology
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A client is having a temporary tracheostomy placed during surgery for oral cancer. What action by the nurse is best to relieve anxiety?
a. Agree on a postoperative communication method.
b. Explain that staff will answer the call light promptly.
c. Give the client a Magic Slate to write on postoperatively.
d. Reassure the client that you will take care of all of his or her needs.

ANS: A
Before surgery that interrupts the clients ability to communicate, the nurse, client, and family (if possible) agree upon a method of communication in the postoperative period. The client may or may not prefer a slate and may not be able to communicate in writing. Reassuring the client and telling him or her you will take care of all of his or her needs does not help the client be an active participant in care. Ensuring that the staff will answer the call light promptly will not guarantee this will occur.

DIF: Applying/Application REF: 1081
KEY: Oral disorders| communication MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

7. A nurse is caring for four clients. After receiving the hand-off report, which client should the nurse see first?
a. Client having a radial neck dissection tomorrow who is asking questions
b. Client who had a tracheostomy 4 hours ago and needs frequent suctioning
c. Client who is 1 day postoperative for an oral tumor resection who is reporting pain
d. Client waiting for discharge instructions after a small tumor resection

ANS: B
The client who needs frequent suctioning should be seen first to ensure that his or her airway is patent. The client waiting for pain medication should be seen next. The nurse may need to call the surgeon to see the client who is asking questions. The client waiting for discharge instructions can be seen last.

DIF: Applying/Application REF: 1080
KEY: Oral disorders| airway| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A client is prescribed cetuximab (Erbitux) for oral cancer and asks the nurse how it works. What response by the nurse is best?
a. It blocks epidermal growth factor.
b. It cuts off the tumors blood supply.
c. It prevents tumor extension.
d. It targets rapidly dividing cells.

ANS: A
Cetuximab (Erbitux) targets and blocks the epidermal growth factor, which contributes to the growth of oral cancers. The other explanations are not correct.

DIF: Understanding/Comprehension REF: 1081
KEY: Oral disorders| cancer| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A client had an oral tumor removed this morning and now has a tracheostomy. What action by the nurse is the priority?
a. Delegate oral care every 4 hours.
b. Monitor and record the clients intake.
c. Place the client in a high-Fowlers position.
d. Remove the inner cannula for cleaning.

ANS: C
To promote airway clearance, this client should be placed in a semi- or high-Fowlers position. Oral care can be delegated, but that is not the priority. Intake and output should also be recorded but again is not the priority. The inner cannula may or may not need to be cleaned, and the tracheostomy may or may not have a disposable cannula.

DIF: Applying/Application REF: 1080
KEY: Oral disorders| airway
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse assesses a clients oral cavity and observes the condition depicted in the photo below:

What action by the nurse is best?
a. Ask about the clients human immunodeficiency virus (HIV) status.
b. Assess the client for dysphagia.
c. Listen to the clients lung sounds.
d. Refer the client to an oncologist.

ANS: B
This client has oral candidiasis. If the infection extends down the pharynx, the client could have difficulty swallowing. Therefore, the nurse should assess the client for dysphagia. HIV status may or may not be related but is not the priority. Listening to the lungs is unrelated. Since oral candidiasis is an infectious condition, referral to an oncologist is not needed.

DIF: Applying/Application REF: 1076
KEY: Oral disorders| nursing assessment| dysphagia
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. The nurse is caring for a client with sialadenitis. What comfort measures may the nurse delegate to the unlicensed assistive personnel (UAP)? (Select all that apply.)
a. Applying warm compresses
b. Massaging salivary glands
c. Offering fluids every hour
d. Providing lemon-glycerin swabs
e. Reminding the client to avoid speaking

ANS: A, C
The UAP can apply warm compresses and offer fluids. Massaging salivary glands can be done, but not by the UAP. Lemon-glycerin swabs are drying and should not be used. Speaking has no effect on this condition.

DIF: Applying/Application REF: 1084
KEY: Delegation| oral disorders| comfort measures| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

2. A nurse studying cancer knows that job-related risks for developing oral cancer include which occupations? (Select all that apply.)
a. Coal miner
b. Electrician
c. Metal worker
d. Plumber
e. Textile worker

ANS: A, C, D, E
The occupations of coal mining, metal working, plumbing, and textile work produce exposure to polycyclic aromatic hydrocarbons (PAHs), which are known carcinogens. Electricians do not have this risk.

DIF: Remembering/Knowledge REF: 1079
KEY: Oral disorders| nursing assessment| cancer
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 54: Care of Patients with Esophageal Problems

MULTIPLE CHOICE

1.A client has been taught about alginic acid and sodium bicarbonate (Gaviscon). What statement by the client indicates that teaching has been effective?

a. I can only take this medicine at night.
b. I should take this on a full stomach.
c. This drug decreases stomach acid.
d. This should be taken 1 hour before meals.

ANS: B

Gaviscon should be taken with food in the stomach. It can be taken with meals at any time. Its mechanism of action is not to decrease stomach acid.

DIF:Evaluating/Synthesis REF: 1090

KEY:Gastrointestinal disorders| antacids| patient education

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2.A client has returned to the nursing unit after an open Nissen fundoplication. The client has an indwelling urinary catheter, a nasogastric (NG) tube to low continuous suction, and two IVs. The nurse notes bright red blood in the NG tube. What action should the nurse take first?

a. Document the findings in the chart.
b. Notify the surgeon immediately.
c. Reassess the drainage in 1 hour.
d. Take a full set of vital signs.

ANS: D

The drainage in the NG tube should initially be brown with old blood. The presence of bright red blood indicates bleeding. The nurse should take a set of vital signs to assess for shock and then notify the surgeon. Documentation should occur but is not the first thing the nurse should do. The nurse should not wait an additional hour to reassess.

DIF:Applying/Application REF: 1093

KEY: Gastrointestinal disorders| postoperative nursing| nursing assessment

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3.A client is scheduled to have a fundoplication. What statement by the client indicates a need to review preoperative teaching?

a. After the operation I can eat anything I want.
b. I will have to eat smaller, more frequent meals.
c. I will take stool softeners for several weeks.

d. This surgery may not totally control my symptoms.

ANS: A

Nutritional and lifestyle changes need to continue after surgery as the procedure does not offer a lifetime cure. The other statements show good understanding.

DIF:Evaluating/Synthesis REF: 1094

KEY:Gastrointestinal disorders| patient education

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4.A client with an esophageal tumor has difficulty swallowing and has been working with a speech-language pathologist. What assessment finding by the nurse indicates that the priority goal for this problem is being met?

a. Choosing foods that are easy to swallow
b. Lungs clear after meals and snacks
c. Properly performing swallowing exercises
d. Weight unchanged after 2 weeks

ANS: B

All these assessment findings are positive for this client. However, this client is at high risk for aspiration. Clear lungs after eating indicates no aspiration has occurred. Choosing easy-to-swallow foods, performing swallowing checks, and having an unchanged weight do not assess aspiration, and therefore do not indicate that the priority goal has been met.

DIF:Evaluating/Synthesis REF: 130

KEY:Gastrointestinal disorders| respiratory assessment| patient safety

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5.A client with an esophageal tumor is having extreme difficulty swallowing. For what procedure does the nurse prepare this client?

a. Enteral tube feeding
b. Esophageal dilation
c. Nissen fundoplication
d. Photodynamic therapy

ANS: B

Esophageal dilation can provide immediate relief of esophageal strictures that impair swallowing. Enteral tube feeding is a method of providing nutrition when dysphagia is severe, but esophageal dilation would be attempted before this measure is taken. Nissen fundoplication is performed for severe gastroesophageal reflux disease. Photodynamic therapy is performed for esophageal cancer.

DIF:Understanding/Comprehension REF: 1097

KEY:Gastrointestinal disorders| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6.A client is scheduled for a traditional esophagogastrostomy. All preoperative teaching has been completed and the client and family show good understanding. What action by the nurse is best?

a. Arrange an intensive care unit tour.
b. Assess the clients psychosocial status.
c. Document the teaching and response.
d. Have the client begin nutritional supplements.

ANS: B

Clients facing this long, difficult procedure are often anxious and fearful. The nurse should now assess the clients psychosocial status and provide the care and teaching required based on this assessment. An intensive care unit tour may help decrease stress but is too limited in scope to be the best response. Documentation should be thorough, but the nurse needs to do more than document. The client should begin nutritional supplements prior to the operation, but again this response is too limited in scope.

DIF:Applying/Application REF: 1097

KEY: Gastrointestinal disorders| psychosocial response| nursing assessment| coping

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Psychosocial Integrity

7.A client is 1 day postoperative after having Zenkers diverticula removed. The client has a nasogastric (NG) tube to suction, and for the last 4 hours there has been no drainage. There are no specific care orders for the NG tube in place. What action by the nurse is most appropriate?

a. Document the findings as normal.
b. Irrigate the NG tube with sterile saline.
c. Notify the surgeon about this finding.
d. Remove and reinsert the NG tube.

ANS: C

NG tubes placed during surgery should not be irrigated or moved unless prescribed by the surgeon. The nurse should notify the surgeon about this finding. Documentation is important, but this finding is not normal.

DIF:Applying/Application REF: 1100

KEY: Gastrointestinal disorders| postoperative nursing| nasogastric tubes| communication

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8.A client is in the emergency department with an esophageal trauma. The nurse palpates subcutaneous emphysema in the mediastinal area and up into the lower part of the clients neck. What action by the nurse takes priority?

a. Assess the clients oxygenation.
b. Facilitate a STAT chest x-ray.
c. Prepare for immediate surgery.
d. Start two large-bore IVs.

ANS: A

The priorities of care are airway, breathing, and circulation. The priority option is to assess oxygenation. This occurs before diagnostic or therapeutic procedures. The client needs two large-bore IVs as a trauma client, but oxygenation comes first.

DIF:Applying/Application REF: 1100

KEY:Gastrointestinal disorders| trauma nursing| nursing assessment

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9.A client has a nasogastric (NG) tube. What action by the nursing student requires the registered nurse to intervene?

a. Checking tube placement every 4 to 8 hours
b. Monitoring and documenting drainage from the NG tube
c. Pinning the tube to the gown so the client cannot turn the head
d. Providing oral care every 4 to 8 hours

ANS: C

The client should be able to turn his or her head to prevent pulling the tube out with movement. The other actions are appropriate.

DIF:Applying/Application REF: 1100

KEY:Gastrointestinal disorders| nasogastric tube| supervision

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10.A client has a nasogastric (NG) tube after a Nissen fundoplication. The nurse answers the call light and finds the client vomiting bright red blood with the NG tube lying on the floor. What action should the nurse take first?

a. Notify the surgeon.
b. Put on a pair of gloves.
c. Reinsert the NG tube.
d. Take a set of vital signs.

ANS: B

To avoid exposure to blood and body fluids, the nurse first puts on a pair of gloves. Taking vital signs and notifying the surgeon are also appropriate, but the nurse must protect himself or herself first. The surgeon will

reinsert the NG tube either at the bedside or in surgery if the client needs to go back to the operating room.

DIF:Applying/Application REF: 1091

KEY:Gastrointestinal disorders| Standard Precautions

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11.A client has gastroesophageal reflux disease (GERD). The provider prescribes a proton pump inhibitor. About what medication should the nurse anticipate teaching the client?

a. Famotidine (Pepcid)
b. Magnesium hydroxide (Maalox)
c. Omeprazole (Prilosec)
d. Ranitidine (Zantac)

ANS: C

Omeprazole is a proton pump inhibitor used in the treatment of GERD. Famotidine and ranitidine are histamine blockers. Maalox is an antacid.

DIF:Remembering/Knowledge REF: 1090

KEY: Gastrointestinal disorders| proton pump inhibitors| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12.After hiatal hernia repair surgery, a client is on IV pantoprazole (Protonix). The client asks the nurse why this medication is given since there is no history of ulcers. What response by the nurse is best?

a. Bacteria can often cause ulcers.
b. This operation often causes ulcers.
c. The medication keeps your blood pH low.
d. It prevents stress-related ulcers.

ANS: D

After surgery, anti-ulcer medications such as pantoprazole are often given to prevent stress-related ulcers. The other responses are incorrect.

DIF:Understanding/Comprehension REF: 1090

KEY: Gastrointestinal disorders| proton pump inhibitors| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13.A nurse works on the surgical unit. After receiving the hand-off report, which client should the nurse see first?

a. Client who underwent diverticula removal with a pulse of 106/min

b. Client who had esophageal dilation and is attempting first postprocedure oral intake
c. Client who had an esophagectomy with a respiratory rate of 32/min
d. Client who underwent hernia repair, reporting incisional pain of 7/10

ANS: C

The client who had an esophagectomy has a respiratory rate of 32/min, which is an early sign of sepsis; this client needs to be assessed first. The client who underwent diverticula removal has a pulse that is out of the normal range (106/min), but not terribly so. The client reporting pain needs pain medication, but the client with the elevated respiratory rate needs investigation first. The nurse should see the client who had esophageal dilation prior to and during the first attempt at oral feedings, but this can wait until the other clients are cared for.

DIF:Analyzing/Analysis REF: 1098

KEY:Gastrointestinal disorders| sepsis| nursing assessment

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14.The following data relate to an older client who is 2 hours postoperative after an esophagogastrostomy:

Physical Assessment	**Vital Signs**	**Physician Orders**
Skin dry	Pulse: 128 beats/min	Normal saline at 75 mL/hr
Urine output 20 mL/hr	Blood pressure: 88/50 mm Hg	Morphine sulfate 2 mg IV push every 1 hr PRN pain
NG tube patent with 100 mL brown drainage/hr	Respiratory rate: 20 on ventilator	Intake and output every hour
Restless	Cardiac output: 2.1 L/min	Vital signs every hour
	Oxygen saturation: 99%	Vancomycin (Vancocin) 1 g IV every 8 hr

What action by the nurse is best?

a. Administer the prescribed pain medication.
b. Consult the surgeon about a different antibiotic.
c. Consult the surgeon about increased IV fluids.
d. Have respiratory therapy reduce the respiratory rate.

ANS: C

This clients vital signs, cardiac output, dry skin, and urine output indicate hypovolemia or possible hypotension resulting from pressure placed on the posterior heart during surgery. The client needs more fluids, so the nurse should consult with the surgeon about increasing the fluid intake. The client may be restless as a result of the hypotension and may not need pain medication at this time. There is no reason to request a different antibiotic. The respiratory rate does not need to be adjusted.

DIF:Analyzing/Analysis REF: 1098

KEY: Gastrointestinal disorders| fluid and electrolyte imbalances| communication

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1.The nurse is aware that which factors are related to the development of gastroesophageal reflux disease (GERD)? **(Select all that apply.)**

a. Delayed gastric emptying
b. Eating large meals
c. Hiatal hernia
d. Obesity
e. Viral infections

ANS: A, B, C, D

Many factors predispose a person to GERD, including delayed gastric emptying, eating large meals, hiatal hernia, and obesity. Viral infections are not implicated in the development of GERD, although infection with *Helicobacter pylori* is.

DIF:Remembering/Knowledge REF: 1088

KEY: Gastrointestinal disorders MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2.The nurse is caring for a client who had an esophagectomy 3 days ago and was extubated yesterday. What actions may the nurse delegate to the unlicensed assistive personnel (UAP)? **(Select all that apply.)**

a. Assisting with position changes and getting out of bed
b. Keeping the head of the bed elevated to at least 30 degrees
c. Reminding the client to use the spirometer every 4 hours
d. Taking and recording vital signs per hospital protocol
e. Titrating oxygen based on the clients oxygen saturations

ANS: A, B, D

The UAP can assist with mobility, keep the head of the bed elevated, and take and record vital signs. The client needs to use the spirometer every 1 to 2 hours. The nurse titrates oxygen.

DIF:Applying/Application REF: 1099

KEY: Gastrointestinal disorders| postoperative nursing| delegation| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3.A client has been discharged to an inpatient rehabilitation center after an esophagogastrectomy. What menu selections by the client at the rehabilitation center indicate a good understanding of dietary instructions? **(Select all that apply.)**

a. Boost supplement
b. Greek yogurt
c. Scrambled eggs
d. Whole milk shake
e. Whole wheat

toast

ANS: A, B, C, D

Malnutrition is a serious problem after this procedure. The client needs high-protein, high-calorie foods that are easy to chew and swallow. The Boost supplement, Greek yogurt, scrambled eggs, and whole milk shake are all good choices. The whole wheat bread, while heart healthy, is not a good choice as it is dry and not easy to chew and swallow.

DIF:Evaluating/Synthesis REF: 1099

KEY:Gastrointestinal disorders| nutrition| patient education

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4.The nurse has taught a client about lifestyle modifications for gastroesophageal reflux disease (GERD). What statements by the client indicate good understanding of the teaching? **(Select all that apply.)**

a. I just joined a gym, so I hope that helps me lose weight.
b. I sure hate to give up my coffee, but I guess I have to.
c. I will eat three small meals and three small snacks a day.
d. Sitting upright and not lying down after meals will help.
e. Smoking a pipe is not a problem and I dont have to stop.

ANS: A, B, C, D

Lifestyle modifications can help control GERD and include losing weight if needed; avoiding chocolate, caffeine, and carbonated beverages; eating frequent small meals or snacks; and remaining upright after meals. Tobacco is a risk factor for GERD and should be avoided in all forms.

DIF:Understanding/Comprehension REF: 1090

KEY: Gastrointestinal disorders| lifestyle modifications| patient education

MSC:Integrated Process: Nursing Process: Evaluation

NOT:Client Needs Category: Health Promotion and Maintenance

5.The nurse is working with clients who have esophageal disorders. The nurse should assess the clients for which manifestations? **(Select all that apply.)**

a. Aphasia
b. Dysphagia
c. Eructation
d. Halitosis
e. Weight gain

ANS: B, C, D

Common signs of esophageal disorders include dysphagia, eructation, halitosis, and weight loss. Aphasia is difficulty with speech, commonly seen after stroke.

DIF:Remembering/Knowledge REF: 1101

KEY:Gastrointestinal disorders| nursing assessment

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6.A nurse is teaching clients with gastroesophageal reflux disease (GERD) about foods to avoid. Which foods should the nurse include in the teaching? **(Select all that apply.)**

a. Chocolate
b. Decaffeinated coffee
c. Citrus fruits
d. Peppermint
e. Tomato sauce

ANS: A, C, D, E

Chocolate, citrus fruits such as oranges and grapefruit, peppermint and spearmint, and tomato-based products all contribute to the reflux associated with GERD. Caffeinated teas, coffee, and sodas should be avoided.

DIF:Understanding/Comprehension REF: 1088

KEY:Gastrointestinal disorders| patient education

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 55: Care of Patients with Stomach Disorders

MULTIPLE CHOICE

1. The nurse is caring for a client with peptic ulcer disease who reports sudden onset of sharp abdominal pain. On palpation, the clients abdomen is tense and rigid. What action takes priority?
a. Administer the prescribed pain medication.
b. Notify the health care provider immediately.
c. Percuss all four abdominal quadrants.
d. Take and document a set of vital signs.

ANS: B
This client has manifestations of a perforated ulcer, which is an emergency. The priority is to get the client medical attention. The nurse can take a set of vital signs while someone else calls the provider. The nurse should not percuss the abdomen or give pain medication since the client may need to sign consent for surgery.

DIF: Applying/Application REF: 1109
KEY: Gastrointestinal disorders| nursing assessment| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A client has a pyloric obstruction and reports sudden muscle weakness. What action by the nurse takes priority?
a. Document the findings in the chart.
b. Request an electrocardiogram (ECG).
c. Facilitate a serum potassium test.
d. Place the client on bedrest.

ANS: B
Pyloric stenosis can lead to hypokalemia, which is manifested by muscle weakness. The nurse first obtains an ECG because potassium imbalances can lead to cardiac dysrhythmias. A potassium level is also warranted, as is placing the client on bedrest for safety. Documentation should be thorough, but none of these actions takes priority over the ECG.

DIF: Analyzing/Analysis REF: 1109
KEY: Gastrointestinal disorders| electrolyte imbalances| cardiac system
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A client with peptic ulcer disease is in the emergency department and reports the pain has gotten much worse over the last several days. The clients blood pressure when lying down was 122/80 mm Hg and when standing was 98/52 mm Hg. What action by the nurse is most appropriate?
a. Administer ibuprofen (Motrin).
b. Call the Rapid Response Team.
c. Start a large-bore IV with normal saline.
d. Tell the client to remain lying down.

ANS: C
This client has orthostatic changes to the blood pressure, indicating fluid volume loss. The nurse should start a large-bore IV with isotonic solution. Ibuprofen will exacerbate the ulcer. The Rapid Response Team is not needed at this point. The client should be put on safety precautions, which includes staying in bed, but this is not the priority.

DIF: Applying/Application REF: 1113
KEY: Gastrointestinal disorders| fluid imbalances| nursing assessment
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A client with a bleeding gastric ulcer is having a nuclear medicine scan. What action by the nurse is most

appropriate?
a. Assess the client for iodine or shellfish allergies.
b. Educate the client on the side effects of sedation.
c. Inform the client a second scan may be needed.
d. Teach the client about bowel preparation for the scan.

ANS: C
A second scan may be performed in 1 to 2 days to see if interventions have worked. The nuclear medicine scan does not use iodine-containing contrast dye or sedation. There is no required bowel preparation.

DIF: Understanding/Comprehension REF: 1111
KEY: Gastrointestinal disorders| patient education| nuclear medicine
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A client is being taught about drug therapy for Helicobacter pylori infection. What assessment by the nurse is most important?
a. Alcohol intake of 1 to 2 drinks per week
b. Family history of H. pylori infection
c. Former smoker still using nicotine patches
d. Willingness to adhere to drug therapy

ANS: D
Treatment for this infection involves either triple or quadruple drug therapy, which may make it difficult for clients to remain adherent. The nurse should assess the clients willingness and ability to follow the regimen. The other assessment findings are not as critical.

DIF: Applying/Application REF: 1104
KEY: Gastrointestinal disorders| nursing assessment| anti-ulcer therapy
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

6. An older female client has been prescribed esomeprazole (Nexium) for treatment of chronic gastric ulcers. What teaching is particularly important for this client?
a. Check with the pharmacist before taking other medications.
b. Increase intake of calcium and vitamin D.
c. Report any worsening of symptoms to the provider.
d. Take the medication as prescribed by the provider.

ANS: B
All of this advice is appropriate for any client taking this medication. However, long-term use is associated with osteoporosis and osteoporosis-related fractures. This client is already at higher risk for this problem and should be instructed to increase calcium and vitamin D intake. The other options are appropriate for any client taking any medication and are not specific to the use of esomeprazole.

DIF: Applying/Application REF: 1107
KEY: Gastrointestinal disorders| osteoporosis| proton pump inhibitors| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. The nurse caring for clients with gastrointestinal disorders should understand that which category best describes the mechanism of action of sucralfate (Carafate)?
a. Gastric acid inhibitor
b. Histamine receptor blocker
c. Mucosal barrier fortifier
d. Proton pump inhibitor

ANS: C
Sucralfate is a mucosal barrier fortifier (protector). It is not a gastric acid inhibitor, a histamine receptor

blocker, or a proton pump inhibitor.

DIF: Remembering/Knowledge REF: 1112
KEY: Gastrointestinal disorders| mucosal barrier fortifier
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A nurse answers a clients call light and finds the client in the bathroom, vomiting large amounts of bright red blood. Which action should the nurse take first?
a. Assist the client back to bed.
b. Notify the provider immediately.
c. Put on a pair of gloves.
d. Take a set of vital signs.

ANS: C
All of the actions are appropriate; however, the nurse should put on a pair of gloves first to avoid contamination with blood or body fluids.

DIF: Applying/Application REF: 1105
KEY: Gastrointestinal disorders| Standard Precautions| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A client had an upper gastrointestinal hemorrhage and now has a nasogastric (NG) tube. What comfort measure may the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Lavaging the tube with ice water
b. Performing frequent oral care
c. Re-positioning the tube every 4 hours
d. Taking and recording vital signs

ANS: B
Clients with NG tubes need frequent oral care both for comfort and to prevent infection. Lavaging the tube is done by the nurse. Re-positioning the tube, if needed, is also done by the nurse. The UAP can take vital signs, but this is not a comfort measure.

DIF: Applying/Application REF: 1113
KEY: Gastrointestinal disorders| nasogastric tubes| comfort measures| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

10. A client is scheduled for a total gastrectomy for gastric cancer. What preoperative laboratory result should the nurse report to the surgeon immediately?
a. Albumin: 2.1 g/dL
b. Hematocrit: 28%
c. Hemoglobin: 8.1 mg/dL
d. International normalized ratio (INR): 4.2

ANS: D
An INR as high as 4.2 poses a serious risk of bleeding during the operation and should be reported. The albumin is low and is an expected finding. The hematocrit and hemoglobin are also low, but this is expected in gastric cancer.

DIF: Applying/Application REF: 1117
KEY: Gastrointestinal disorders| cancer| laboratory values| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. A client has a recurrence of gastric cancer and is in the gastrointestinal clinic crying. What response by the

nurse is most appropriate?
a. Do you have family or friends for support?
b. Id like to know what you are feeling now.
c. Well, we knew this would probably happen.
d. Would you like me to refer you to hospice?

ANS: B
The nurse assesses the clients emotional state with open-ended questions and statements and shows a willingness to listen to the clients concerns. Asking about support people is very limited in nature, and yes-or-no questions are not therapeutic. Stating that this was expected dismisses the clients concerns. The client may or may not be ready to hear about hospice, and this is another limited, yes-or-no question.

DIF: Applying/Application REF: 1116
KEY: Gastrointestinal disorders| cancer| therapeutic communication| psychosocial response
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

12. A client with peptic ulcer disease asks the nurse about taking slippery elm supplements. What response by the nurse is best?
a. Slippery elm has no benefit for this problem.
b. Slippery elm is often used for this disorder.
c. There is no evidence that this will work.
d. You should not take any herbal remedies.

ANS: B
There are several complementary and alternative medicine regimens that are used for gastritis and peptic ulcer disease. Most have been tested on animals but not humans. Slippery elm is a common supplement used for this disorder.

DIF: Understanding/Comprehension REF: 1108
KEY: Gastrointestinal disorders| complementary therapy| patient education
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Health Promotion and Maintenance

13. A nurse is teaching a client about magnesium hydroxide with aluminum hydroxide (Maalox). What instruction is most appropriate?
a. Aspirin must be avoided.
b. Do not worry about black stools.
c. Report diarrhea to your provider.
d. Take 1 hour before meals.

ANS: C
Maalox can cause hypermagnesemia, which causes diarrhea, so the client should be taught to report this to the provider. Aspirin is avoided with bismuth sulfate (Pepto-Bismol). Black stools can be caused by Pepto-Bismol. Maalox should be taken after meals.

DIF: Understanding/Comprehension REF: 1106
KEY: Gastrointestinal disorders| antacids| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14. For which client would the nurse suggest the provider not prescribe misoprostol (Cytotec)?
a. Client taking antacids
b. Client taking antibiotics
c. Client who is pregnant
d. Client over 65 years of age

ANS: C
Misoprostol can cause abortion, so pregnant women should not take this drug. The other clients have no

contraindications to taking misoprostol.

DIF: Remembering/Knowledge REF: 1106
KEY: Gastrointestinal disorders| prostaglandin analogues
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. A client has dumping syndrome after a partial gastrectomy. Which action by the nurse would be most helpful?
a. Arrange a dietary consult.
b. Increase fluid intake.
c. Limit the clients foods.
d. Make the client NPO.

ANS: A
The client with dumping syndrome after a gastrectomy has multiple dietary needs. A referral to the registered dietitian will be extremely helpful. Food and fluid intake is complicated and needs planning. The client should not be NPO.

DIF: Applying/Application REF: 1117
KEY: Gastrointestinal disorders| referrals| nutrition
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16. An older client has gastric cancer and is scheduled to have a partial gastrectomy. The family does not want the client told about her diagnosis. What action by the nurse is best?
a. Ask the family why they feel this way.
b. Assess family concerns and fears.
c. Refuse to go along with the familys wishes.
d. Tell the family that such secrets cannot be kept.

ANS: B
The nurse should use open-ended questions and statements to fully assess the familys concerns and fears. Asking why questions often puts people on the defensive and is considered a barrier to therapeutic communication. Refusing to follow the familys wishes or keep their confidence will not help move this family from their position and will set up an adversarial relationship.

DIF: Applying/Application REF: 1119
KEY: Gastrointestinal disorders| ethics| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A client has a gastrointestinal hemorrhage and is prescribed two units of packed red blood cells. What actions should the nurse perform prior to hanging the blood? (Select all that apply.)
a. Ask a second nurse to double-check the blood.
b. Prime the IV tubing with normal saline.
c. Prime the IV tubing with dextrose in water.
d. Take and record a set of vital signs.
e. Teach the client about reaction manifestations.

ANS: A, B, D, E
Prior to starting a blood transfusion, the nurse asks another nurse to double-check the blood (and client identity), primes the IV tubing with normal saline, takes and records a baseline set of vital signs, and teaches the client about manifestations to report. The IV tubing is not primed with dextrose in water.

DIF: Applying/Application REF: 1113
KEY: Patient safety| blood transfusions

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. The student nurse learns about risk factors for gastric cancer. Which factors does this include? (Select all that apply.)
a. Achlorhydria
b. Chronic atrophic gastritis
c. Helicobacter pylori infection
d. Iron deficiency anemia
e. Pernicious anemia

ANS: A, B, C, E
Achlorhydria, chronic atrophic gastritis, H. pylori infection, and pernicious anemia are all risk factors for developing gastric cancer. Iron deficiency anemia is not a risk factor.

DIF: Remembering/Knowledge REF: 1115
KEY: Gastrointestinal disorders| gastrointestinal assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. The student nurse studying stomach disorders learns that the risk factors for acute gastritis include which of the following? (Select all that apply.)
a. Alcohol
b. Caffeine
c. Corticosteroids
d. Fruit juice
e. Nonsteroidal anti-inflammatory drugs (NSAIDs)

ANS: A, B, C, E
Risk factors for acute gastritis include alcohol, caffeine, corticosteroids, and chronic NSAID use. Fruit juice is not a risk factor, although in some people it does cause distress.

DIF: Remembering/Knowledge REF: 1104
KEY: Gastrointestinal disorders MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A client has dumping syndrome. What menu selections indicate the client understands the correct diet to manage this condition? (Select all that apply.)
a. Canned unsweetened apricots
b. Coffee cake
c. Milk shake
d. Potato soup
e. Steamed broccoli

ANS: A, D
Canned apricots and potato soup are appropriate selections as they are part of a high-protein, high-fat, low- to moderate-carbohydrate diet. Coffee cake and other sweets must be avoided. Milk products and sweet drinks such as shakes must be avoided. Gas-forming foods such as broccoli must also be avoided.

DIF: Remembering/Knowledge REF: 1118
KEY: Gastrointestinal disorders| nutrition| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse working with a client who has possible gastritis assesses the clients gastrointestinal system. Which findings indicate a chronic condition as opposed to acute gastritis? (Select all that apply.)
a. Anorexia
b. Dyspepsia
c. Intolerance of fatty foods

d. Pernicious anemia
e. Nausea and vomiting

ANS: C, D
Intolerance of fatty or spicy foods and pernicious anemia are signs of chronic gastritis. Anorexia and nausea/vomiting can be seen in both conditions. Dyspepsia is seen in acute gastritis.

DIF: Remembering/Knowledge REF: 1105
KEY: Gastrointestinal disorders| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A client who had a partial gastrectomy has several expected nutritional problems. What actions by the nurse are best to promote better nutrition? (Select all that apply.)
a. Administer vitamin B12 injections.
b. Ask the provider about folic acid replacement.
c. Educate the client on enteral feedings.
d. Obtain consent for total parenteral nutrition.
e. Provide iron supplements for the client.

ANS: A, B, E
After gastrectomy, clients are at high risk for anemia due to vitamin B12 deficiency, folic acid deficiency, or iron deficiency. The nurse should provide supplements for all these nutrients. The client does not need enteral feeding or total parenteral nutrition.

DIF: Understanding/Comprehension REF: 1118
KEY: Gastrointestinal disorders| anemia| supplements
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse is preparing to administer pantoprazole (Protonix) intravenously. What actions by the nurse are most appropriate? (Select all that apply.)
a. Administer the drug through a separate IV line.
b. Infuse pantoprazole using an IV pump.
c. Keep the drug in its original brown bag.
d. Take vital signs frequently during infusion.
e. Use an in-line IV filter when infusing.

ANS: A, B, E
When infusing pantoprazole, use a separate IV line, a pump, and an in-line filter. A brown wrapper and frequent vital signs are not needed.

DIF: Applying/Application REF: 1107
KEY: Gastrointestinal disorders| proton pump inhibitors
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 56: Care of Patients with Noninflammatory Intestinal Disorders

MULTIPLE CHOICE

1. After teaching a client with irritable bowel syndrome (IBS), a nurse assesses the clients understanding. Which menu selection indicates that the client correctly understands the dietary teaching?
a. Ham sandwich on white bread, cup of applesauce, glass of diet cola
b. Broiled chicken with brown rice, steamed broccoli, glass of apple juice
c. Grilled cheese sandwich, small banana, cup of hot tea with lemon
d. Baked tilapia, fresh green beans, cup of coffee with low-fat milk

ANS: B
Clients with IBS are advised to eat a high-fiber diet (30 to 40 g/day), with 8 to 10 cups of liquid daily. Chicken with brown rice, broccoli, and apple juice has the highest fiber content. They should avoid alcohol, caffeine, and other gastric irritants.

DIF: Applying/Application REF: 1122
KEY: Irritable bowel| nutritional requirements
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

2. A nurse assesses a client who is prescribed alosetron (Lotronex). Which assessment question should the nurse ask this client?
a. Have you been experiencing any constipation?
b. Are you eating a diet high in fiber and fluids?
c. Do you have a history of high blood pressure?
d. What vitamins and supplements are you taking?

ANS: A
Ischemic colitis is a life-threatening complication of alosetron. The nurse should assess the client for constipation. The other questions do not identify complications related to alosetron.

DIF: Applying/Application REF: 1123
KEY: Medications| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. After teaching a client who has a femoral hernia, the nurse assesses the clients understanding. Which statement indicates the client needs additional teaching related to the proper use of a truss?
a. I will put on the truss before I go to bed each night.
b. Ill put some powder under the truss to avoid skin irritation.
c. The truss will help my hernia because I cant have surgery.
d. If I have abdominal pain, Ill let my health care provider know right away.

ANS: A
The client should be instructed to apply the truss before arising, not before going to bed at night. The other statements show an accurate understanding of using a truss.

DIF: Applying/Application REF: 1124
KEY: Herniation
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse assesses a client who is recovering from a hemorrhoidectomy that was done the day before. The nurse notes that the client has lower abdominal distention accompanied by dullness to percussion over the distended area. Which action should the nurse take?
a. Assess the clients heart rate and blood pressure.
b. Determine when the client last voided.
c. Ask if the client is experiencing flatus.

d. Auscultate all quadrants of the clients abdomen.

ANS: B
Assessment findings indicate that the client may have an over-full bladder. In the immediate postoperative period, the client may experience difficulty voiding due to urinary retention. The nurse should assess when the client last voided. The clients vital signs may be checked after the nurse determines the clients last void. Asking about flatus and auscultating bowel sounds are not related to a hemorrhoidectomy.

DIF: Applying/Application REF: 1142
KEY: Postoperative nursing| urinary retention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse assesses clients at a community health center. Which client is at highest risk for the development of colorectal cancer?
a. A 37-year-old who drinks eight cups of coffee daily
b. A 44-year-old with irritable bowel syndrome (IBS)
c. A 60-year-old lawyer who works 65 hours per week
d. A 72-year-old who eats fast food frequently

ANS: D
Colon cancer is rare before the age of 40, but its incidence increases rapidly with advancing age. Fast food tends to be high in fat and low in fiber, increasing the risk for colon cancer. Coffee intake, IBS, and a heavy workload do not increase the risk for colon cancer.

DIF: Applying/Application REF: 1126
KEY: Colorectal cancer| health screening
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse assessing a client with colorectal cancer auscultates high-pitched bowel sounds and notes the presence of visible peristaltic waves. Which action should the nurse take?
a. Ask if the client is experiencing pain in the right shoulder.
b. Perform a rectal examination and assess for polyps.
c. Contact the provider and recommend computed tomography.
d. Administer a laxative to increase bowel movement activity.

ANS: C
The presence of visible peristaltic waves, accompanied by high-pitched or tingling bowel sounds, is indicative of partial obstruction caused by the tumor. The nurse should contact the provider with these results and recommend a computed tomography scan for further diagnostic testing. This assessment finding is not associated with right shoulder pain; peritonitis and cholecystitis are associated with referred pain to the right shoulder. The registered nurse is not qualified to complete a rectal examination for polyps, and laxatives would not help this client.

DIF: Applying/Application REF: 1128
KEY: Colorectal cancer| intestinal obstruction
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse prepares a client for a colonoscopy scheduled for tomorrow. The client states, My doctor told me that the fecal occult blood test was negative for colon cancer. I dont think I need the colonoscopy and would like to cancel it. How should the nurse respond?
a. Your doctor should not have given you that information prior to the colonoscopy.
b. The colonoscopy is required due to the high percentage of false negatives with the blood test.
c. A negative fecal occult blood test does not rule out the possibility of colon cancer.
d. I will contact your doctor so that you can discuss your concerns about the procedure.

ANS: C

A negative result from a fecal occult blood test does not completely rule out the possibility of colon cancer. To determine whether the client has colon cancer, a colonoscopy should be performed so the entire colon can be visualized and a tissue sample taken for biopsy. The client may want to speak with the provider, but the nurse should address the clients concerns prior to contacting the provider.

DIF: Understanding/Comprehension REF: 1128
KEY: Colorectal cancer| assessment/diagnostic examination
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A nurse cares for a client newly diagnosed with colon cancer who has become withdrawn from family members. Which action should the nurse take?
a. Contact the provider and recommend a psychiatric consult for the client.
b. Encourage the client to verbalize feelings about the diagnosis.
c. Provide education about new treatment options with successful outcomes.
d. Ask family and friends to visit the client and provide emotional support.

ANS: B
The nurse recognizes that the client may be expressing feelings of grief. The nurse should encourage the client to verbalize feelings and identify fears to move the client through the phases of the grief process. A psychiatric consult is not appropriate for the client. The nurse should not brush aside the clients feelings with discussions related to cancer prognosis and treatment. The nurse should not assume that the client desires family or friends to visit or provide emotional support.

DIF: Applying/Application REF: 1132
KEY: Colorectal cancer| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

9. A nurse cares for a client with colon cancer who has a new colostomy. The client states, I think it would be helpful to talk with someone who has had a similar experience. How should the nurse respond?
a. I have a good friend with a colostomy who would be willing to talk with you.
b. The enterostomal therapist will be able to answer all of your questions.
c. I will make a referral to the United Ostomy Associations of America.
d. Youll find that most people with colostomies dont want to talk about them.

ANS: C
Nurses need to become familiar with community-based resources to better assist clients. The local chapter of the United Ostomy Associations of America has resources for clients and their families, including Ostomates (specially trained visitors who also have ostomies). The nurse should not suggest that the client speak with a personal contact of the nurse. Although the enterostomal therapist is an expert in ostomy care, talking with him or her is not the same as talking with someone who actually has had a colostomy. The nurse should not brush aside the clients request by saying that most people with colostomies do not want to talk about them. Many people are willing to share their ostomy experience in the hope of helping others.

DIF: Applying/Application REF: 1134
KEY: Colorectal cancer| ostomy care| coping| support
MSC: Integrated Process: Caring
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. An emergency room nurse assesses a client after a motor vehicle crash and notes ecchymotic areas across the clients lower abdomen. Which action should the nurse take first?
a. Measure the clients abdominal girth.
b. Assess for abdominal guarding or rigidity.
c. Check the clients hemoglobin and hematocrit.
d. Obtain the clients complete health history.

ANS: B
On noticing the ecchymotic areas, the nurse should check to see if abdominal guarding or rigidity is present, because this could indicate major organ injury. The nurse should then notify the provider. Measuring

abdominal girth or obtaining a complete health history is not appropriate at this time. Laboratory test results can be checked after assessment for abdominal guarding or rigidity.

DIF: Applying/Application REF: 1139
KEY: Gastrointestinal trauma| hemorrhage
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. A nurse cares for a client who states, My husband is repulsed by my colostomy and refuses to be intimate with me. How should the nurse respond?
a. Lets talk to the ostomy nurse to help you and your husband work through this.
b. You could try to wear longer lingerie that will better hide the ostomy appliance.
c. You should empty the pouch first so it will be less noticeable for your husband.
d. If you are not careful, you can hurt the stoma if you engage in sexual activity.

ANS: A
The nurse should collaborate with the ostomy nurse to help the client and her husband work through intimacy issues. The nurse should not minimize the clients concern about her husband with ways to hide the ostomy. The client will not hurt the stoma by engaging in sexual activity.

DIF: Applying/Application REF: 1133
KEY: Ostomy care| support| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

12. A nurse cares for a client who is recovering from a hemorrhoidectomy. The client states, I need to have a bowel movement. Which action should the nurse take?
a. Obtain a bedside commode for the client to use.
b. Stay with the client while providing privacy.
c. Make sure the call light is in reach to signal completion.
d. Gather supplies to collect a stool sample for the laboratory.

ANS: B
The first bowel movement after hemorrhoidectomy can be painful enough to induce syncope. The nurse should stay with the client. The nurse should instruct clients who are discharged the same day to have someone nearby when they have their first postoperative bowel movement. Making sure the call light is within reach is an important nursing action too, but it does not take priority over client safety. Obtaining a bedside commode and taking a stool sample are not needed in this situation.

DIF: Applying/Application REF: 1142
KEY: Postoperative care| syncope
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. An emergency room nurse cares for a client who has been shot in the abdomen and is hemorrhaging heavily. Which action should the nurse take first?
a. Send a blood sample for a type and crossmatch.
b. Insert a large intravenous line for fluid resuscitation.
c. Obtain the heart rate and blood pressure.
d. Assess and maintain a patent airway.

ANS: D
All of the options are important nursing actions in the care of a trauma client. However, airway always comes first. The client must have a patent airway, or other interventions will not be helpful.

DIF: Applying/Application REF: 1139
KEY: GI trauma| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A nurse assesses a client with a mechanical bowel obstruction who reports intermittent abdominal pain. An hour later the client reports constant abdominal pain. Which action should the nurse take next?
a. Administer intravenous opioid medications.
b. Position the client with knees to chest.
c. Insert a nasogastric tube for decompression.
d. Assess the clients bowel sounds.

ANS: D
A change in the nature and timing of abdominal pain in a client with a bowel obstruction can signal peritonitis or perforation. The nurse should immediately check for rebound tenderness and the absence of bowel sounds. The nurse should not medicate the client until the provider has been notified of the change in his or her condition. The nurse may help the client to the knee-chest position for comfort, but this is not the priority action. The nurse need not insert a nasogastric tube for decompression.

DIF: Applying/Application REF: 1134
KEY: Intestinal obstruction| pain management
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse assesses a client who is prescribed 5-fluorouracil (5-FU) chemotherapy intravenously for the treatment of colon cancer. Which assessment finding should alert the nurse to contact the health care provider?
a. White blood cell (WBC) count of 1500/mm3
b. Fatigue
c. Nausea and diarrhea
d. Mucositis and oral ulcers

ANS: A
Common side effects of 5-FU include fatigue, leukopenia, diarrhea, mucositis and mouth ulcers, and peripheral neuropathy. However, the clients WBC count is very low (normal range is 5000 to 10,000/mm3), so the provider should be notified. He or she may want to delay chemotherapy by a day or two. Certainly the client is at high risk for infection. The other assessment findings are consistent with common side effects of 5-FU that would not need to be reported immediately.

DIF: Applying/Application REF: 1128
KEY: Colorectal cancer| medications| adverse effects
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A nurse cares for a client who had a colostomy placed in the ascending colon 2 weeks ago. The client states, The stool in my pouch is still liquid. How should the nurse respond?
a. The stool will always be liquid with this type of colostomy.
b. Eating additional fiber will bulk up your stool and decrease diarrhea.
c. Your stool will become firmer over the next couple of weeks.
d. This is abnormal. I will contact your health care provider.

ANS: A
The stool from an ascending colostomy can be expected to remain liquid because little large bowel is available to reabsorb the liquid from the stool. This finding is not abnormal. Liquid stool from an ascending colostomy will not become firmer with the addition of fiber to the clients diet or with the passage of time.

DIF: Applying/Application REF: 1128
KEY: Ostomy care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

17. A nurse cares for a middle-aged male client who has irritable bowel syndrome (IBS). The client states, I have changed my diet and take bulk-forming laxatives, but my symptoms have not gotten better. I heard about a drug called Amitiza. Do you think it might help? How should the nurse respond?
a. This drug is still in the research phase and is not available for public use yet.

b. Unfortunately, lubiprostone is approved only for use in women.
c. Lubiprostone works well. I will recommend this prescription to your provider.
d. This drug should not be used with bulk-forming laxatives.

ANS: B
Lubiprostone (Amitiza) is a new drug for IBS with constipation that works by simulating receptors in the intestines to increase fluid and promote bowel transit time. Lubiprostone is currently approved only for use in women. Trials with increased numbers of male participants are needed prior to Food and Drug Administration approval for men.

DIF: Applying/Application REF: 1123
KEY: Irritable bowel| medications MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

18. A nurse teaches a client who is recovering from a colon resection. Which statement should the nurse include in this clients plan of care?
a. You may experience nausea and vomiting for the first few weeks.
b. Carbonated beverages can help decrease acid reflux from anastomosis sites.
c. Take a stool softener to promote softer stools for ease of defecation.
d. You may return to your normal workout schedule, including weight lifting.

ANS: C
Clients recovering from a colon resection should take a stool softener as prescribed to keep stools a soft consistency for ease of passage. Nausea and vomiting are symptoms of intestinal obstruction and perforation and should be reported to the provider immediately. The client should be advised to avoid gas-producing foods and carbonated beverages, and avoid lifting heavy objects or straining on defecation.

DIF: Applying/Application REF: 1132
KEY: Colorectal cancer| postoperative nursing| bowel care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

19. A nurse teaches a client who is at risk for colon cancer. Which dietary recommendation should the nurse teach this client?
a. Eat low-fiber and low-residual foods.
b. White rice and bread are easier to digest.
c. Add vegetables such as broccoli and cauliflower to your new diet.
d. Foods high in animal fat help to protect the intestinal mucosa.

ANS: C
The client should be taught to modify his or her diet to decrease animal fat and refined carbohydrates. The client should also increase high-fiber foods and Brassica vegetables, including broccoli and cauliflower, which help to protect the intestinal mucosa from colon cancer.

DIF: Applying/Application REF: 1126
KEY: Colorectal cancer| nutritional requirements
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

20. A nurse cares for a client who has a new colostomy. Which action should the nurse take?
a. Empty the pouch frequently to remove excess gas collection.
b. Change the ostomy pouch and wafer every morning.
c. Allow the pouch to completely fill with stool prior to emptying it.
d. Use surgical tape to secure the pouch and prevent leakage.

ANS: A
The nurse should empty the new ostomy pouch frequently because of excess gas collection, and empty the pouch when it is one-third to one-half full of stool. The ostomy pouch does not need to be changed every morning. Ostomy wafers with paste should be used to secure and seal the ostomy appliance; surgical tape

should not be used.

DIF: Applying/Application REF: 1131
KEY: Ostomy care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

21. A nurse cares for a client who has a family history of colon cancer. The client states, My father and my brother had colon cancer. What is the chance that I will get cancer? How should the nurse respond?
a. If you eat a low-fat and low-fiber diet, your chances decrease significantly.
b. You are safe. This is an autosomal dominant disorder that skips generations.
c. Preemptive surgery and chemotherapy will remove cancer cells and prevent cancer.
d. You should have a colonoscopy more frequently to identify abnormal polyps early.

ANS: D
The nurse should encourage the client to have frequent colonoscopies to identify abnormal polyps and cancerous cells early. The abnormal gene associated with colon cancer is an autosomal dominant gene mutation that does not skip a generation and places the client at high risk for cancer. Changing the clients diet, preemptive chemotherapy, and removal of polyps will decrease the clients risk but will not prevent cancer. However, a client at risk for colon cancer should eat a low-fat and high-fiber diet.

DIF: Applying/Application REF: 1132
KEY: Colorectal cancer| genetics MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse inserts a nasogastric (NG) tube for an adult client who has a bowel obstruction. Which actions does the nurse perform correctly? (Select all that apply.)
a. Performs hand hygiene and positions the client in high-Fowlers position, with pillows behind the head and shoulders
b. Instructs the client to extend the neck against the pillow once the NG tube has reached the oropharynx
c. Checks for correct placement by checking the pH of the fluid aspirated from the tube
d. Secures the NG tube by taping it to the clients nose and pinning the end to the pillowcase
e. Connects the NG tube to intermittent medium suction with an anti-reflux valve on the air vent

ANS: A, C, E
The clients head should be flexed forward once the NG tube has reached the oropharynx. The NG tube should be secured to the clients gown, not to the pillowcase, because it could become dislodged easily. All the other actions are appropriate.

DIF: Applying/Application REF: 1136
KEY: Intestinal obstruction
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. After teaching a client who is recovering from a colon resection, the nurse assesses the clients understanding. Which statements by the client indicate a correct understanding of the teaching? (Select all that apply.)
a. I must change the ostomy appliance daily and as needed.
b. I will use warm water and a soft washcloth to clean around the stoma.
c. I might start bicycling and swimming again once my incision has healed.
d. Cutting the flange will help it fit snugly around the stoma to avoid skin breakdown.
e. I will check the stoma regularly to make sure that it stays a deep red color.
f. I must avoid dairy products to reduce gas and odor in the pouch.

ANS: B, C, D
The ostomy appliance should be changed as needed when the adhesive begins to decrease, placing the appliance at risk of leaking. Changing the appliance daily can cause skin breakdown as the adhesive will still

be secured to the clients skin. The client should avoid using soap to clean around the stoma because it might prevent effective adhesion of the ostomy appliance. The client should use warm water and a soft washcloth instead. The tissue of the stoma is very fragile, and scant bleeding may occur when the stoma is cleaned. The flange should be cut to fit snugly around the stoma to reduce contact between excretions and the clients skin. Exercise (other than some contact sports) is important for clients with an ostomy. The stoma should remain a soft pink color. A deep red or purple hue indicates ischemia and should be reported to the surgeon right away. Yogurt and buttermilk can help reduce gas in the pouch, so the client need not avoid dairy products.

DIF: Applying/Application REF: 1131
KEY: Colorectal cancer| postoperative care
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

3. A nurse assesses a client with irritable bowel syndrome (IBS). Which questions should the nurse include in this clients assessment? (Select all that apply.)
a. Which food types cause an exacerbation of symptoms?
b. Where is your pain and what does it feel like?
c. Have you lost a significant amount of weight lately?
d. Are your stools soft, watery, and black in color?
e. Do you experience nausea associated with defecation?

ANS: A, B, E
The nurse should ask the client about factors that may cause exacerbations of symptoms, including food, stress, and anxiety. The nurse should also assess the location, intensity, and quality of the clients pain, and nausea associated with defecation or meals. Clients who have IBS do not usually lose weight and stools are not black in color.

DIF: Applying/Application REF: 1122
KEY: Irritable bowel| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A nurse plans care for a client who is recovering from an inguinal hernia repair. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Encouraging ambulation three times a day
b. Encouraging normal urination
c. Encouraging deep breathing and coughing
d. Providing ice bags and scrotal support
e. Forcibly reducing the hernia

ANS: A, B, D
Postoperative care for clients with an inguinal hernia includes all general postoperative care except coughing. The nurse should promote lung expansion by encouraging deep breathing and ambulation. The nurse should encourage normal urination, including allowing the client to stand, and should provide scrotal support and ice bags to prevent swelling. A hernia should never be forcibly reduced, and this procedure is not part of postoperative care.

DIF: Applying/Application REF: 1125
KEY: Herniation| postoperative care
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse cares for a client who has been diagnosed with a small bowel obstruction. Which assessment findings should the nurse correlate with this diagnosis? (Select all that apply.)
a. Serum potassium of 2.8 mEq/L
b. Loss of 15 pounds without dieting
c. Abdominal pain in upper quadrants
d. Low-pitched bowel sounds
e. Serum sodium of 121 mEq/L

ANS: A, C, E
Small bowel obstructions often lead to severe fluid and electrolyte imbalances. The client is hypokalemic (normal range is 3.5 to 5.0 mEq/L) and hyponatremic (normal range is 136 to 145 mEq/L). Abdominal pain across the upper quadrants is associated with small bowel obstruction. Dramatic weight loss without dieting followed by bowel obstruction leads to the probable development of colon cancer. High-pitched sounds may be noted with small bowel obstructions.

DIF: Applying/Application REF: 1136
KEY: Intestinal obstruction| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse assesses a male client with an abdominal hernia. Which abdominal hernias are correctly paired with their physiologic processes? (Select all that apply.)
a. Indirect inguinal hernia An enlarged plug of fat eventually pulls the peritoneum and often the bladder into a sac
b. Femoral hernia A peritoneum sac pushes downward and may descend into the scrotum
c. Direct inguinal hernia A peritoneum sac passes through a weak point in the abdominal wall
d. Ventral hernia Results from inadequate healing of an incision
e. Incarcerated hernia Contents of the hernia sac cannot be reduced back into the abdominal cavity

ANS: C, D, E
A direct inguinal hernia occurs when a peritoneum sac passes through a weak point in the abdominal wall. A ventral hernia results from inadequate healing of an incision. An incarcerated hernia cannot be reduced or placed back into the abdominal cavity. An indirect inguinal hernia is a sac formed from the peritoneum that contains a portion of the intestine and pushes downward at an angle into the inguinal canal. An indirect inguinal hernia often descends into the scrotum. A femoral hernia protrudes through the femoral ring and, as the clot enlarges, pulls the peritoneum and often the urinary bladder into the sac.

DIF: Applying/Application REF: 1123
KEY: Herniation
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse plans care for a client who has chronic diarrhea. Which actions should the nurse include in this clients plan of care? (Select all that apply.)
a. Using premoistened disposable wipes for perineal care
b. Turning the client from right to left every 2 hours
c. Using an antibacterial soap to clean after each stool
d. Applying a barrier cream to the skin after cleaning
e. Keeping broken skin areas open to air to promote healing

ANS: A, B, D
The nurse should use premoistened disposable wipes instead of toilet paper for perineal care, or mild soap and warm water after each stool. Antibacterial soap would be too abrasive and damage good bacteria on the skin. The nurse should apply a thin layer of a medicated protective barrier after cleaning the skin. The client should be re-positioned frequently so that he or she is kept off the affected area, and open skin areas should be covered with DuoDerm or Tegaderm occlusive dressing to promote rapid healing.

DIF: Remembering/Knowledge REF: 1143
KEY: Bowel care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A nurse cares for a client who has a nasogastric (NG) tube. Which actions should the nurse take? (Select all that apply.)
a. Assess for proper placement of the tube every 4 hours.
b. Flush the tube with water every hour to ensure patency.

c. Secure the NG tube to the clients upper lip.
d. Disconnect suction when auscultating bowel peristalsis.
e. Monitor the clients skin around the tube site for irritation.

ANS: A, D, E
The nurse should assess for proper placement, tube patency, and output every 4 hours. The nurse should also monitor the skin around the tube for irritation and secure the tube to the clients nose. When auscultating bowel sounds for peristalsis, the nurse should disconnect suction.

DIF: Applying/Application REF: 1136
KEY: Drain
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

SHORT ANSWER

1. A nurse prepares to administer 12 mg/kg of 5-fluorouracil chemotherapy intravenously to a client who has colon cancer. The client weights 132 lb. How many milligrams should the nurse administer? (Record your answer using a whole number.) _____ mg

ANS:
720 mg
132 lb = 60 kg.
60 kg 12 mg/kg = 720 mg.

DIF: Applying/Application REF: 1129
KEY: Medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 57: Care of Patients with Inflammatory Intestinal Disorders

MULTIPLE CHOICE

1. A nurse assesses a client who has appendicitis. Which clinical manifestation should the nurse expect to find?
a. Severe, steady right lower quadrant pain
b. Abdominal pain associated with nausea and vomiting
c. Marked peristalsis and hyperactive bowel sounds
d. Abdominal pain that increases with knee flexion

ANS: A
Right lower quadrant pain, specifically at McBurneys point, is characteristic of appendicitis. Usually if nausea and vomiting begin first, the client has gastroenteritis. Marked peristalsis and hyperactive bowel sounds are not indicative of appendicitis. Abdominal pain due to appendicitis decreases with knee flexion.

DIF: Remembering/Knowledge REF: 1145
KEY: Inflammatory bowel disorder| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse cares for an older adult client who has Salmonella food poisoning. The clients vital signs are heart rate: 102 beats/min, blood pressure: 98/55 mm Hg, respiratory rate: 22 breaths/min, and oxygen saturation: 92%. Which action should the nurse complete first?
a. Apply oxygen via nasal cannula.
b. Administer intravenous fluids.
c. Provide perineal care with a premedicated wipe.
d. Teach proper food preparation to prevent contamination.

ANS: B
Dehydration caused by diarrhea can occur quickly in older clients with Salmonella food poisoning, so maintenance of fluid balance is a high priority. Monitoring vital signs and providing perineal care are important nursing actions but are of lower priority than fluid replacement. The nurse should teach the client about proper hand hygiene to prevent the spread of infection, and preparation of food and beverages to prevent contamination.

DIF: Applying/Application REF: 1149
KEY: Inflammatory bowel disorder| hydration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nurse teaches a client who has viral gastroenteritis. Which dietary instruction should the nurse include in this clients teaching?
a. Drink plenty of fluids to prevent dehydration.
b. You should only drink 1 liter of fluids daily.
c. Increase your protein intake by drinking more milk.
d. Sips of cola or tea may help to relieve your nausea.

ANS: A
The client should drink plenty of fluids to prevent dehydration. Milk products may not be tolerated. Caffeinated beverages increase intestinal motility and should be avoided.

DIF: Applying/Application REF: 1149
KEY: Inflammatory bowel disorder| nutritional requirements
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. After teaching a client who was hospitalized for Salmonella food poisoning, a nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. I will let my husband do all of the cooking for my family.

b. Ill take the ciprofloxacin until the diarrhea has resolved.
c. I should wash my hands with antibacterial soap before each meal.
d. I must place my dishes into the dishwasher after each meal.

ANS: B
Ciprofloxacin should be taken for 10 to 14 days to treat Salmonella infection, and should not be stopped once the diarrhea has cleared. Clients should be advised to take the entire course of medication. People with Salmonella should not prepare foods for others because the infection may be spread in this way. Hands should be washed with antibacterial soap before and after eating to prevent spread of the bacteria. Dishes and eating utensils should not be shared and should be cleaned thoroughly. Clients can be carriers for up to 1 year.

DIF: Applying/Application REF: 1149
KEY: Inflammatory bowel disorder| medications| antibiotics| medication safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse assesses a client who is hospitalized with an exacerbation of Crohns disease. Which clinical manifestation should the nurse expect to find?
a. Positive Murphys sign with rebound tenderness to palpitation
b. Dull, hypoactive bowel sounds in the lower abdominal quadrants
c. High-pitched, rushing bowel sounds in the right lower quadrant
d. Reports of abdominal cramping that is worse at night

ANS: C
The nurse expects high-pitched, rushing bowel sounds due to narrowing of the bowel lumen in Crohns disease. A positive Murphys sign is indicative of gallbladder disease, and rebound tenderness often indicates peritonitis. Dullness in the lower abdominal quadrants and hypoactive bowel sounds are not commonly found with Crohns disease. Nightly worsening of abdominal cramping is not consistent with Crohns disease.

DIF: Applying/Application REF: 1158
KEY: Crohns disease| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. After teaching a client with diverticular disease, a nurse assesses the clients understanding. Which menu selection made by the client indicates the client correctly understood the teaching?
a. Roasted chicken with rice pilaf and a cup of coffee with cream
b. Spaghetti with meat sauce, a fresh fruit cup, and hot tea
c. Garden salad with a cup of bean soup and a glass of low-fat milk
d. Baked fish with steamed carrots and a glass of apple juice

ANS: D
Clients who have diverticular disease are prescribed a low-residue diet. Whole grains (rice pilaf), uncooked fruits and vegetables (salad, fresh fruit cup), and high-fiber foods (cup of bean soup) should be avoided with a low-residue diet. Canned or cooked vegetables are appropriate. Apple juice does not contain fiber and is acceptable for a low-residue diet.

DIF: Applying/Application REF: 1163
KEY: Diverticular disease| nutritional requirements
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A nurse cares for a teenage girl with a new ileostomy. The client states, I cannot go to prom with an ostomy. How should the nurse respond?
a. Sure you can. Purchase a prom dress one size larger to hide the ostomy appliance.
b. The pouch wont be as noticeable if you avoid broccoli and carbonated drinks prior to the prom.
c. Lets talk to the enterostomal therapist about options for ostomy supplies and dress styles.
d. You can remove the pouch from your ostomy appliance when you are at the prom so that it is less noticeable.

ANS: C
The ostomy nurse is a valuable resource for clients, providing suggestions for supplies and methods to manage the ostomy. A larger dress size will not necessarily help hide the ostomy appliance. Avoiding broccoli and carbonated drinks does not offer reassurance for the client. Ileostomies have an almost constant liquid effluent, so pouch removal during the prom is not feasible.

DIF: Applying/Application REF: 1156
KEY: Ostomy care| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. After teaching a client with perineal excoriation caused by diarrhea from acute gastroenteritis, a nurse assesses the clients understanding. Which statement by the client indicates a need for additional teaching?
a. Ill rinse my rectal area with warm water after each stool and apply zinc oxide ointment.
b. I will clean my rectal area thoroughly with toilet paper after each stool and then apply aloe vera gel.
c. I must take a sitz bath three times a day and then pat my rectal area gently but thoroughly to make sure I am dry.
d. I shall clean my rectal area with a soft cotton washcloth and then apply vitamin A and D ointment.

ANS: B
Toilet paper can irritate the sensitive perineal skin, so warm water rinses or soft cotton washcloths should be used instead. Although aloe vera may facilitate healing of superficial abrasions, it is not an effective skin barrier for diarrhea. Skin barriers such as zinc oxide and vitamin A and D ointment help protect the rectal area from the excoriating effects of liquid stools. Patting the skin is recommended instead of rubbing the skin dry.

DIF: Applying/Application REF: 1155
KEY: Bowel care| inflammatory bowel disorder
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. After teaching a client who is prescribed adalimumab (Humira) for severe ulcerative colitis, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. I will avoid large crowds and people who are sick.
b. I will take this medication with my breakfast each morning.
c. Nausea and vomiting are common side effects of this drug.
d. I must wash my hands after I play with my dog.

ANS: B
Adalimumab (Humira) is an immune modulator that must be given via subcutaneous injection. It does not need to be given with food or milk. Nausea and vomiting are two common side effects. Adalimumab can cause immune suppression, so clients receiving the medication should avoid large crowds and people who are sick, and should practice good handwashing.

DIF: Applying/Application REF: 1159
KEY: Ulcerative colitis| medication safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10. A nurse cares for a client who is prescribed mesalamine (Asacol) for ulcerative colitis. The client states, I am having trouble swallowing this pill. Which action should the nurse take?
a. Contact the clinical pharmacist and request the medication in suspension form.
b. Empty the contents of the capsule into applesauce or pudding for administration.
c. Ask the health care provider to prescribe the medication as an enema instead.
d. Crush the pill carefully and administer it in applesauce or pudding.

ANS: C
Asacol is the oral formula for mesalamine and is produced as an enteric-coated pill that should not be crushed, chewed, or broken. Asacol is not available as a suspension or elixir. If the client is unable to swallow the

Asacol pill, a mesalamine enema (Rowasa) may be administered instead, with a providers order.

DIF: Applying/Application REF: 1152
KEY: Ulcerative colitis| medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11. A nurse assesses a client who has ulcerative colitis and severe diarrhea. Which assessment should the nurse complete first?
a. Inspection of oral mucosa
b. Recent dietary intake
c. Heart rate and rhythm
d. Percussion of abdomen

ANS: C
Although the client with severe diarrhea may experience skin irritation and hypovolemia, the client is most at risk for cardiac dysrhythmias secondary to potassium and magnesium loss from severe diarrhea. The client should have her or his electrolyte levels monitored, and electrolyte replacement may be necessary. Oral mucosa inspection, recent dietary intake, and abdominal percussion are important parts of physical assessment but are lower priority for this client than heart rate and rhythm.

DIF: Applying/Application REF: 1148
KEY: Ulcerative colitis| hydration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

12. A nurse assesses a client with Crohns disease and colonic strictures. Which clinical manifestation should alert the nurse to urgently contact the health care provider?
a. Distended abdomen
b. Temperature of 100.0 F (37.8 C)
c. Loose and bloody stool
d. Lower abdominal cramps

ANS: A
The presence of strictures predisposes the client to intestinal obstruction. Abdominal distention may indicate that the client has developed an obstruction of the large bowel, and the clients provider should be notified right away. Low-grade fever, bloody diarrhea, and abdominal cramps are common symptoms of Crohns disease.

DIF: Applying/Application REF: 1155
KEY: Crohns disease| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A nurse reviews the chart of a client who has Crohns disease and a draining fistula. Which documentation should alert the nurse to urgently contact the provider for additional prescriptions?
a. Serum potassium of 2.6 mEq/L
b. Client ate 20% of breakfast meal
c. White blood cell count of 8200/mm3
d. Clients weight decreased by 3 pounds

ANS: A
Fistulas place the client with Crohns disease at risk for hypokalemia which can lead to serious dysrhythmias. This potassium level is low and should cause the nurse to intervene. The white blood cell count is normal. The other two findings are abnormal and also warrant intervention, but the potassium level takes priority.

DIF: Applying/Application REF: 1160
KEY: Crohns disease| electrolyte imbalance
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. After teaching a client who has a new colostomy, the nurse provides feedback based on the clients ability tc complete self-care activities. Which statement should the nurse include in this feedback?
a. I realize that you had a tough time today, but it will get easier with practice.
b. You cleaned the stoma well. Now you need to practice putting on the appliance.
c. You seem to understand what I taught you today. What else can I help you with?
d. You seem uncomfortable. Do you want your daughter to care for your ostomy?

ANS: B
The nurse should provide both approval and room for improvement in feedback after a teaching session. Feedback should be objective and constructive, and not evaluative. Reassuring the client that things will improve does not offer anything concrete for the client to work on, nor does it let him or her know what was done well. The nurse should not make the client convey learning needs because the client may not know what else he or she needs to understand. The client needs to become the expert in self-management of the ostomy, and the nurse should not offer to teach the daughter instead of the client.

DIF: Applying/Application REF: 1155
KEY: Ostomy care| psychosocial response| coping
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

15. A nurse assesses a client who is hospitalized for botulism. The clients vital signs are temperature: 99.8 F (37.6 C), heart rate: 100 beats/min, respiratory rate: 10 breaths/min, and blood pressure: 100/62 mm Hg. Which action should the nurse take?
a. Decrease stimulation and allow the client to rest.
b. Stay with the client while another nurse calls the provider.
c. Increase the clients intravenous fluid replacement rate.
d. Check the clients blood glucose and administer orange juice.

ANS: B
A client with botulism is at risk for respiratory failure. This clients respiratory rate is slow, which could indicate impending respiratory distress or failure. The nurse should remain with the client while another nurse notifies the provider. The nurse should monitor and document the IV infusion per protocol, but this client does not require additional intravenous fluids. Allowing the client to rest or checking the clients blood glucose and administering orange juice are not appropriate actions.

DIF: Applying/Application REF: 1167
KEY: Inflammatory bowel disorder| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

16. After teaching a client who has diverticulitis, a nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. Ill ride my bike or take a long walk at least three times a week.
b. I must try to include at least 25 grams of fiber in my diet every day.
c. I will take a laxative nightly at bedtime to avoid becoming constipated.
d. I should use my legs rather than my back muscles when I lift heavy objects.

ANS: C
Laxatives are not recommended for clients with diverticulitis because they can increase pressure in the bowel, causing additional outpouching of the lumen. Exercise and a high-fiber diet are recommended for clients with diverticulitis because they promote regular bowel function. Using the leg muscles rather than the back for lifting prevents abdominal straining.

DIF: Applying/Application REF: 1163
KEY: Diverticulitis| medication
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

17. A nurse cares for a client who has a Giardia infection. Which medication should the nurse anticipate being

prescribed for this client?
a. Metronidazole (Flagyl)
b. Ciprofloxacin (Cipro)
c. Sulfasalazine (Azulfidine)
d. Ceftriaxone (Rocephin)

ANS: A
Metronidazole is the drug of choice for a Giardia infection. Ciprofloxacin and ceftriaxone are antibiotics used for bacterial infections. Sulfasalazine is used for ulcerative colitis and Crohns disease.

DIF: Remembering/Knowledge REF: 1166
KEY: Parasitic infection| medication
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

18. A nurse cares for a client who has food poisoning resulting from a Clostridium botulinum infection. Which assessment should the nurse complete first?
a. Heart rate and rhythm
b. Bowel sounds
c. Urinary output
d. Respiratory rate

ANS: D
Severe infection with C. botulinum can lead to respiratory failure, so assessments of oxygen saturation and respiratory rate are of high priority for clients with suspected C. botulinum infection. The other assessments may be completed after the respiratory system has been assessed.

DIF: Applying/Application REF: 1167
KEY: Hydration| inflammatory bowel disorder
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

19. A nurse plans care for a client with Crohns disease who has a heavily draining fistula. Which intervention should the nurse indicate as the priority action in this clients plan of care?
a. Low-fiber diet
b. Skin protection
c. Antibiotic administration
d. Intravenous glucocorticoids

ANS: B
Protecting the clients skin is the priority action for a client who has a heavily draining fistula. Intestinal fluid enzymes are caustic and can cause skin breakdown or fungal infections if the skin is not protected. The plan of care for a client who has Crohns disease includes adequate nutrition focused on high-calorie, high-protein, high-vitamin, and low-fiber meals, antibiotic administration, and glucocorticoids.

DIF: Applying/Application REF: 1157
KEY: Crohns disease| bowel care
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

20. A nurse assesses a client who is recovering from an ileostomy placement. Which clinical manifestation should alert the nurse to urgently contact the health care provider?
a. Pale and bluish stoma
b. Liquid stool
c. Ostomy pouch intact
d. Blood-smeared output

ANS: A
The nurse should assess the stoma for color and contact the health care provider if the stoma is pale, bluish, or

dark. The nurse should expect the client to have an intact ostomy pouch with dark green liquid stool that may contain some blood.

DIF: Applying/Application REF: 1153
KEY: Ostomy care| postoperative nursing
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

21. A nurse cares for a client with a new ileostomy. The client states, I dont think my friends will accept me with this ostomy. How should the nurse respond?
a. Your friends will be happy that you are alive.
b. Tell me more about your concerns.
c. A therapist can help you resolve your concerns.
d. With time you will accept your new body.

ANS: B
Social anxiety and apprehension are common in clients with a new ileostomy. The nurse should encourage the client to discuss concerns. The nurse should not minimize the clients concerns or provide false reassurance.

DIF: Applying/Application REF: 1156
KEY: Ostomy care| coping| support MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

22. A nurse cares for a client with ulcerative colitis. The client states, I feel like I am tied to the toilet. This disease is controlling my life. How should the nurse respond?
a. Lets discuss potential factors that increase your symptoms.
b. If you take the prescribed medications, you will no longer have diarrhea.
c. To decrease distress, do not eat anything before you go out.
d. You must retake control of your life. I will consult a therapist to help.

ANS: A
Clients with ulcerative colitis often express that the disorder is disruptive to their lives. Stress factors can increase symptoms. These factors should be identified so that the client will have more control over his or her condition. Prescription medications and anorexia will not eliminate exacerbations. Although a therapist may assist the client, this is not an appropriate response.

DIF: Applying/Application REF: 1156
KEY: Ulcerative colitis| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

MULTIPLE RESPONSE

1. After teaching a client with a parasitic gastrointestinal infection, a nurse assesses the clients understanding. Which statements made by the client indicate that the client correctly understands the teaching? (Select all that apply.)
a. Ill have my housekeeper keep my toilet clean.
b. I must take a shower or bathe every day.
c. I should have my well water tested.
d. I will ask my sexual partner to have a stool test.
e. I must only eat raw vegetables from my own garden.

ANS: B, C, D
Parasitic infections can be transmitted to other people. The client himself or herself should keep the toilet area clean instead of possibly exposing another person to the disease. Parasites are transmitted via unclean water sources and sexual practices with rectal contact. The client should test his or her well water and ask sexual partners to have their stool examined for parasites. Raw vegetables are not associated with parasitic gastrointestinal infections. The client can eat vegetables from the store or a home garden as long as the water source is clean.

DIF: Applying/Application REF: 1166
KEY: Parasitic infection| infection control
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A nurse teaches a client how to avoid becoming ill with Salmonella infection again. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. Wash leafy vegetables carefully before eating or cooking them.
b. Do not ingest water from the garden hose or the pool.
c. Wash your hands before and after using the bathroom.
d. Be sure meat is cooked to the proper temperature.
e. Avoid eating eggs that are sunny side up or undercooked.

ANS: A, C, D, E
Salmonella is usually contracted via contaminated eggs, beef, poultry, and green leafy vegetables. It is not transmitted through water in garden hoses or pools. Clients should wash leafy vegetables well, wash hands before and after using the restroom, make sure meat and eggs are cooked properly, and, because it can be transmitted by flies, keep flies off of food.

DIF: Applying/Application REF: 1167
KEY: Inflammatory bowel disorder| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. A nurse teaches a community group ways to prevent Escherichia coli infection. Which statements should the nurse include in this groups teaching? (Select all that apply.)
a. Wash your hands after any contact with animals.
b. It is not necessary to buy a meat thermometer.
c. Stay away from people who are ill with diarrhea.
d. Use separate cutting boards for meat and vegetables.
e. Avoid swimming in backyard pools and using hot tubs.

ANS: A, D
Washing hands after contact with animals and using separate cutting boards for meat and other foods will help prevent E. coli infection. The other statements are not related to preventing E. coli infection.

DIF: Applying/Application REF: 1148
KEY: Inflammatory bowel disorder| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A nurse teaches a community group about food poisoning and gastroenteritis. Which statements should the nurse include in this groups teaching? (Select all that apply.)
a. Rotavirus is more common among infants and younger children.
b. Escherichia coli diarrhea is transmitted by contact with infected animals.
c. To prevent E. coli infection, dont drink water when swimming.
d. Clients who have botulism should be quarantined within their home.
e. Parasitic diseases may not show up for 1 to 2 weeks after infection.

ANS: A, C, E
Rotavirus is more common among the youngest of clients. Not drinking water while swimming can help prevent E. coli infection. Parasitic diseases may take up to 2 weeks to become symptomatic. People with botulism need to be hospitalized to monitor for respiratory failure and paralysis. Escherichia coli is not transmitted by contact with infected animals.

DIF: Applying/Application REF: 1148
KEY: Inflammatory bowel disorder| infection control
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. After teaching a client with an anal fissure, a nurse assesses the clients understanding. Which client actions indicate that the client correctly understands the teaching? (Select all that apply.)
a. Taking a warm sitz bath several times each day
b. Utilizing a daily enema to prevent constipation
c. Using bulk-producing agents to aid elimination
d. Self-administering anti-inflammatory suppositories
e. Taking a laxative each morning

ANS: A, C, D
Taking warm sitz baths each day, using bulk-producing agents, and administering anti-inflammatory suppositories are all appropriate actions for the client with an anal fissure. The client should not use enemas or laxatives to promote elimination, but rather should rely on bulk-producing agents such as psyllium hydrophilic mucilloid (Metamucil).

DIF: Applying/Application REF: 1165
KEY: Skin lesions/wounds| bowel care
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. A nurse assesses a client with peritonitis. Which clinical manifestations should the nurse expect to find? (Select all that apply.)
a. Distended abdomen
b. Inability to pass flatus
c. Bradycardia
d. Hyperactive bowel sounds
e. Decreased urine output

ANS: A, B, E
A client with peritonitis may present with a distended abdomen, diminished bowel sounds, inability to pass flatus or feces, tachycardia, and decreased urine output secondary to dehydration. Bradycardia and hyperactive bowel sounds are not associated with peritonitis.

DIF: Remembering/Knowledge REF: 1146
KEY: Inflammatory bowel disorder| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse assesses a client with ulcerative colitis. Which complications are paired correctly with their physiologic processes? (Select all that apply.)
a. Lower gastrointestinal bleeding Erosion of the bowel wall
b. Abscess formation Localized pockets of infection develop in the ulcerated bowel lining
c. Toxic megacolon Transmural inflammation resulting in pyuria and fecaluria
d. Nonmechanical bowel obstruction Paralysis of colon resulting from colorectal cancer
e. Fistula Dilation and colonic ileus caused by paralysis of the colon

ANS: A, B, D
Lower GI bleeding can lead to erosion of the bowel wall. Abscesses are localized pockets of infection that develop in the ulcerated bowel lining. Nonmechanical bowel obstruction is paralysis of the colon that results from colorectal cancer. When the inflammation is transmural, fistulas can occur between the bowel and bladder resulting in pyuria and fecaluria. Paralysis of the colon causing dilation and subsequent colonic ileus is known as a toxic megacolon.

DIF: Understanding/Comprehension REF: 1157
KEY: Ulcerative colitis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

SHORT ANSWER

1. A nurse cares for a client who is prescribed 5 mg/kg of infliximab (Remicade) intravenously. The client weighs 110 lbs and the pharmacy supplies infliximab 100 mg/10 mL solution. How many milliliters should the nurse administer to this client? (Record your answer using a whole number.) ____ mL

ANS:
25 mL
100 lb = 50 kg.
50 kg 5 mg/kg = 250 mg.

DIF: Applying/Application REF: 1152
KEY: Medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 58: Care of Patients with Liver Problems

MULTIPLE CHOICE

1. A nurse obtains a clients health history at a community health clinic. Which statement alerts the nurse to provide health teaching to this client?
a. I drink two glasses of red wine each week.
b. I take a lot of Tylenol for my arthritis pain.
c. I have a cousin who died of liver cancer.
d. I got a hepatitis vaccine before traveling.

ANS: B
Acetaminophen (Tylenol) can cause liver damage if taken in large amounts. Clients should be taught not to exceed 4000 mg/day of acetaminophen. The nurse should teach the client about this limitation and should explore other drug options with the client to manage his or her arthritis pain. Two glasses of wine each week, a cousin with liver cancer, and the hepatitis vaccine do not place the client at risk for a liver disorder, and therefore do not require any health teaching.

DIF: Applying/Application REF: 1179
KEY: Cirrhosis| acetaminophen| medication safety
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse cares for a client who has cirrhosis of the liver. Which action should the nurse take to decrease the presence of ascites?
a. Monitor intake and output.
b. Provide a low-sodium diet.
c. Increase oral fluid intake.
d. Weigh the client daily.

ANS: B
A low-sodium diet is one means of controlling abdominal fluid collection. Monitoring intake and output does not control fluid accumulation, nor does weighing the client. These interventions merely assess or monitor the situation. Increasing fluid intake would not be helpful.

DIF: Applying/Application REF: 1179
KEY: Cirrhosis| nutritional requirements
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse assesses a client who is recovering from a paracentesis 1 hour ago. Which assessment finding requires action by the nurse?
a. Urine output via indwelling urinary catheter is 20 mL/hr
b. Blood pressure increases from 110/58 to 120/62 mm Hg
c. Respiratory rate decreases from 18 to 14 breaths/min
d. A decrease in the clients weight by 6 kg

ANS: A
Rapid removal of ascetic fluid causes decreased abdominal pressure, which can contribute to hypovolemia. This can be manifested by a decrease in urine output to below 30 mL/hr. A slight increase in systolic blood pressure is insignificant. A decrease in respiratory rate indicates that breathing has been made easier by the procedure. The nurse would expect the clients weight to drop as fluid is removed. Six kilograms is less than 3 pounds and is expected.

DIF: Applying/Application REF: 1176
KEY: Hydration| hemodynamics| cirrhosis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse cares for a client who is hemorrhaging from bleeding esophageal varices and has an esophagogastric tube. Which action should the nurse take first?
a. Sedate the client to prevent tube dislodgement.
b. Maintain balloon pressure at 15 and 20 mm Hg.
c. Irrigate the gastric lumen with normal saline.
d. Assess the client for airway patency.

ANS: D
Maintaining airway patency is the primary nursing intervention for this client. The nurse suctions oral secretions to prevent aspiration and occlusion of the airway. The client usually is intubated and mechanically ventilated during this treatment. The client should be sedated, balloon pressure should be maintained between 15 and 20 mm Hg, and the lumen can be irrigated with saline or tap water. However, these are not a higher priority than airway patency.

DIF: Applying/Application REF: 1170
KEY: Hemorrhaging| respiratory distress/failure| cirrhosis
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse assesses a client who is prescribed an infusion of vasopressin (Pitressin) for bleeding esophageal varices. Which clinical manifestation should alert the nurse to a serious adverse effect?
a. Nausea and vomiting
b. Frontal headache
c. Vertigo and syncope
d. Mid-sternal chest pain

ANS: D
Mid-sternal chest pain is indicative of acute angina or myocardial infarction, which can be precipitated by vasopressin. Nausea and vomiting, headache, and vertigo and syncope are not side effects of vasopressin.

DIF: Applying/Application REF: 1177
KEY: Hemorrhaging| cirrhosis| vascular perfusion
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse cares for a client with hepatic portal-systemic encephalopathy (PSE). The client is thin and cachectic in appearance, and the family expresses distress that the client is receiving little dietary protein. How should the nurse respond?
a. A low-protein diet will help the liver rest and will restore liver function.
b. Less protein in the diet will help prevent confusion associated with liver failure.
c. Increasing dietary protein will help the client gain weight and muscle mass.
d. Low dietary protein is needed to prevent fluid from leaking into the abdomen.

ANS: B
A low-protein diet is ordered when serum ammonia levels increase and/or the client shows signs of PSE. A low-protein diet helps reduce excessive breakdown of protein into ammonia by intestinal bacteria. Encephalopathy is caused by excess ammonia. A low-protein diet has no impact on restoring liver function. Increasing the clients dietary protein will cause complications of liver failure and should not be suggested. Increased intravascular protein will help prevent ascites, but clients with liver failure are not able to effectively synthesize dietary protein.

DIF: Applying/Application REF: 1171
KEY: Cirrhosis| nutritional requirements| support
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A nurse cares for a client who is prescribed lactulose (Heptalac). The client states, I do not want to take this medication because it causes diarrhea. How should the nurse respond?
a. Diarrhea is expected; thats how your body gets rid of ammonia.

b. You may take Kaopectate liquid daily for loose stools.
c. Do not take any more of the medication until your stools firm up.
d. We will need to send a stool specimen to the laboratory.

ANS: A
The purpose of administering lactulose to this client is to help ammonia leave the circulatory system through the colon. Lactulose draws water into the bowel with its high osmotic gradient, thereby producing a laxative effect and subsequently evacuating ammonia from the bowel. The client must understand that this is an expected and therapeutic effect for him or her to remain compliant. The nurse should not suggest administering anything that would decrease the excretion of ammonia or holding the medication. There is no need to send a stool specimen to the laboratory because diarrhea is the therapeutic response to this medication.

DIF: Applying/Application REF: 1178
KEY: Cirrhosis| medication| coping MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. After teaching a client who has been diagnosed with hepatitis A, the nurse assesses the clients understanding. Which statement by the client indicates a correct understanding of the teaching?
a. Some medications have been known to cause hepatitis A.
b. I may have been exposed when we ate shrimp last weekend.
c. I was infected with hepatitis A through a recent blood transfusion.
d. My infection with Epstein-Barr virus can co-infect me with hepatitis A.

ANS: B
The route of acquisition of hepatitis A infection is through close personal contact or ingestion of contaminated water or shellfish. Hepatitis A is not transmitted through medications, blood transfusions, or Epstein-Barr virus. Toxic and drug-induced hepatitis is caused from exposure to hepatotoxins, but this is not a form of hepatitis A. Hepatitis B can be spread through blood transfusions. Epstein-Barr virus causes a secondary infection that is not associated with hepatitis A.

DIF: Applying/Application REF: 1180
KEY: Hepatitis| infection control
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

9. A nurse assesses clients at a community health fair. Which client is at greatest risk for the development of hepatitis B?
a. A 20-year-old college student who has had several sexual partners
b. A 46-year-old woman who takes acetaminophen daily for headaches
c. A 63-year-old businessman who travels frequently across the country
d. An 82-year-old woman who recently ate raw shellfish for dinner

ANS: A
Hepatitis B can be spread through sexual contact, needle sharing, needle sticks, blood transfusions, hemodialysis, acupuncture, and the maternal-fetal route. A person with multiple sexual partners has more opportunities to contract the infection. Hepatitis B is not transmitted through medications, casual contact with other travelers, or raw shellfish. Although an overdose of acetaminophen can cause liver cirrhosis, this is not associated with hepatitis B. Hepatitis E is found most frequently in international travelers. Hepatitis A is spread through ingestion of contaminated shellfish.

DIF: Understanding/Comprehension REF: 1180
KEY: Hepatitis| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

10. A nurse teaches a client with hepatitis C who is prescribed ribavirin (Copegus). Which statement should the nurse include in this clients discharge education?
a. Use a pill organizer to ensure you take this medication as prescribed.
b. Transient muscle aching is a common side effect of this medication.

c. Follow up with your provider in 1 week to test your blood for toxicity.
d. Take your radial pulse for 1 minute prior to taking this medication.

ANS: A
Treatment of hepatitis C with ribavirin takes up to 48 weeks, making compliance a serious issue. The nurse should work with the client on a strategy to remain compliant for this length of time. Muscle aching is not a common side effect. The client will be on this medication for many weeks and does not need a blood toxicity examination. There is no need for the client to assess his or her radial pulse prior to taking the medication.

DIF: Applying/Application REF: 1184
KEY: Hepatitis| medication
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11. After teaching a client who has plans to travel to a non-industrialized country, the nurse assesses the clients understanding regarding the prevention of viral hepatitis. Which statement made by the client indicates a need for additional teaching?
a. I should drink bottled water during my travels.
b. I will not eat off anothers plate or share utensils.
c. I should eat plenty of fresh fruits and vegetables.
d. I will wash my hands frequently and thoroughly.

ANS: C
The client should be advised to avoid fresh, raw fruits and vegetables because they can be contaminated by tap water. Drinking bottled water, and not sharing plates, glasses, or eating utensils are good ways to prevent illness, as is careful handwashing.

DIF: Applying/Application REF: 1182
KEY: Hepatitis| infection control
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

12. An emergency room nurse assesses a client after a motor vehicle crash. The nurse notices a steering wheel mark across the clients chest. Which action should the nurse take?
a. Ask the client where in the car he or she was sitting during the crash.
b. Assess the client by gently palpating the abdomen for tenderness.
c. Notify the laboratory to draw blood for blood type and crossmatch.
d. Place the client on the stretcher in reverse Trendelenburg position.

ANS: B
The liver is often injured by a steering wheel in a motor vehicle crash. Because the clients chest was marked by the steering wheel, the nurse should perform an abdominal assessment. Assessing the clients position in the crash is not needed because of the steering wheel imprint. The client may or may not need a blood transfusion. The client does not need to be in reverse Trendelenburg position.

DIF: Applying/Application REF: 1185
KEY: Abdominal trauma| emergency nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A nurse assesses clients on the medical-surgical unit. Which client is at greatest risk for the development of carcinoma of the liver?
a. A 22-year-old with a history of blunt liver trauma
b. A 48-year-old with a history of diabetes mellitus
c. A 66-year-old who has a history of cirrhosis
d. An 82-year-old who has chronic malnutrition

ANS: C
The risk of contracting a primary carcinoma of the liver is higher in clients with cirrhosis from any cause.

Blunt liver trauma, diabetes mellitus, and chronic malnutrition do not increase a persons risk for developing liver cancer.

DIF: Remembering/Knowledge REF: 1181
KEY: Liver cancer| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A telehealth nurse speaks with a client who is recovering from a liver transplant 2 weeks ago. The client states, I am experiencing right flank pain and have a temperature of 101 F. How should the nurse respond?
a. The anti-rejection drugs you are taking make you susceptible to infection.
b. You should go to the hospital immediately to have your new liver checked out.
c. You should take an additional dose of cyclosporine today.
d. Take acetaminophen (Tylenol) every 4 hours until you feel better.

ANS: B
Fever, right quadrant or flank pain, and jaundice are signs of liver transplant rejection; the client should be admitted to the hospital as soon as possible for intervention. Anti-rejection drugs do make a client more susceptible to infection, but this client has signs of rejection, not infection. The nurse should not advise the client to take an additional dose of cyclosporine or acetaminophen as these medications will not treat the acute rejection.

DIF: Applying/Application REF: 1187
KEY: Organ transplantation MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. After teaching a client who has alcohol-induced cirrhosis, a nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. I cannot drink any alcohol at all anymore.
b. I need to avoid protein in my diet.
c. I should not take over-the-counter medications.
d. I should eat small, frequent, balanced meals.

ANS: B
Based on the degree of liver involvement and decreased function, protein intake may have to be decreased. However, some protein is necessary for the synthesis of albumin and normal healing. The other statements indicate accurate understanding of self-care measures for this client.

DIF: Applying/Application REF: 1174
KEY: Cirrhosis| nutritional requirements
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

16. A nurse cares for a client with hepatopulmonary syndrome who is experiencing dyspnea with oxygen saturations at 92%. The client states, I do not want to wear the oxygen because it causes my nose to bleed. Get out of my room and leave me alone! Which action should the nurse take?
a. Instruct the client to sit in as upright a position as possible.
b. Add humidity to the oxygen and encourage the client to wear it.
c. Document the clients refusal, and call the health care provider.
d. Contact the provider to request an extra dose of the clients diuretic.

ANS: A
The client with hepatopulmonary syndrome is often dyspneic. Because the oxygen saturation is not significantly low, the nurse should first allow the client to sit upright to see if that helps. If the client remains dyspneic, or if the oxygen saturation drops further, the nurse should investigate adding humidity to the oxygen and seeing whether the client will tolerate that. The other two options may be beneficial, but they are not the best choices. If the client is comfortable, his or her agitation will decrease; this will improve respiratory status.

DIF: Applying/Application REF: 1176

KEY: Cirrhosis| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

17. A nurse cares for a client who is scheduled for a paracentesis. Which intervention should the nurse delegate to an unlicensed assistive personnel (UAP)?
a. Have the client sign the informed consent form.
b. Assist the client to void before the procedure.
c. Help the client lie flat in bed on the right side.
d. Get the client into a chair after the procedure.

ANS: B
For safety, the client should void just before a paracentesis. The nurse or the provider should have the client sign the consent form. The proper position for a paracentesis is sitting upright in bed or, alternatively, sitting or the side of the bed and leaning over the bedside table. The client will be on bedrest after the procedure.

DIF: Applying/Application REF: 1176
KEY: Cirrhosis| informed consent| preoperative nursing| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A nurse cares for a client who has chronic cirrhosis from substance abuse. The client states, All of my family hates me. How should the nurse respond?
a. You should make peace with your family.
b. This is not unusual. My family hates me too.
c. I will help you identify a support system.
d. You must attend Alcoholics Anonymous.

ANS: C
Clients who have chronic cirrhosis may have alienated relatives over the years because of substance abuse. The nurse should assist the client to identify a friend, neighbor, or person in his or her recovery group for support. The nurse should not minimize the clients concerns by brushing off the clients comment. Attending AA may be appropriate, but this response doesnt address the clients concern. Making peace with the clients family may not be possible. This statement is not client-centered.

DIF: Applying/Application REF: 1179
KEY: Cirrhosis| support| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

19. A nurse cares for a client with hepatitis C. The clients brother states, I do not want to contract this infection, so I will not go into his hospital room. How should the nurse respond?
a. If you wear a gown and gloves, you will not get this virus.
b. Viral hepatitis is not spread through casual contact.
c. This virus is only transmitted through a fecal specimen.
d. I can give you an update on your brothers status from here.

ANS: B
Although family members may be afraid that they will contract hepatitis C, the nurse should educate the clients family about how the virus is spread. Viral hepatitis, or hepatitis C, is spread via blood-to-blood transmission and is associated with illicit IV drug needle sharing, blood and organ transplantation, accidental needle sticks, unsanitary tattoo equipment, and sharing of intranasal cocaine paraphernalia. Wearing a gown and gloves will not decrease the transmission of this virus. Hepatitis C is not spread through casual contact or a fecal specimen. The nurse would be violating privacy laws by sharing the clients status with the brother.

DIF: Applying/Application REF: 1181
KEY: Hepatitis| infection control MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

MULTIPLE RESPONSE

1. An infection control nurse develops a plan to decrease the number of health care professionals who contract viral hepatitis at work. Which ideas should the nurse include in this plan? (Select all that apply.)
a. Policies related to consistent use of Standard Precautions
b. Hepatitis vaccination mandate for workers in high-risk areas
c. Implementation of a needleless system for intravenous therapy
d. Number of sharps used in client care reduced where possible
e. Postexposure prophylaxis provided in a timely manner

ANS: A, C, D, E
Nurses should always use Standard Precautions for client care, and policies should reflect this. Needleless systems and reduction of sharps can help prevent hepatitis. Postexposure prophylaxis should be provided immediately. All health care workers should receive the hepatitis vaccinations that are available.

DIF: Applying/Application REF: 1182
KEY: Hepatitis| infection control| policy
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A nurse assesses a client who has liver disease. Which laboratory findings should the nurse recognize as potentially causing complications of this disorder? (Select all that apply.)
a. Elevated aspartate transaminase
b. Elevated international normalized ratio (INR)
c. Decreased serum globulin levels
d. Decreased serum alkaline phosphatase
e. Elevated serum ammonia
f. Elevated prothrombin time (PT)

ANS: B, E, F
Elevated INR and PT are indications of clotting disturbances and alert the nurse to the increased possibility of hemorrhage. Elevated ammonia levels increase the clients confusion. The other values are abnormal and associated with liver disease but do not necessarily place the client at increased risk for complications.

DIF: Applying/Application REF: 1187
KEY: Cirrhosis| laboratory results
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A nurse delegates hygiene care for a client who has advanced cirrhosis to an unlicensed nursing personnel (UAP). Which statements should the nurse include when delegating this task to the UAP? (Select all that apply.)
a. Apply lotion to the clients dry skin areas.
b. Use a basin with warm water to bathe the client.
c. For the clients oral care, use a soft toothbrush.
d. Provide clippers so the client can trim the fingernails.
e. Bathe with antibacterial and water-based soaps.

ANS: A, C, D
Clients with advanced cirrhosis often have pruritus. Lotion will help decrease itchiness from dry skin. A soft toothbrush should be used to prevent gum bleeding, and the clients nails should be trimmed short to prevent the client from scratching himself or herself. These clients should use cool, not warm, water on their skin, and should not use excessive amounts of soap.

DIF: Remembering/Knowledge REF: 1176
KEY: Cirrhosis| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A nurse assesses a male client who has symptoms of cirrhosis. Which questions should the nurse ask to identify potential factors contributing to this laboratory result? (Select all that apply.)

a. How frequently do you drink alcohol?
b. Have you ever had sex with a man?
c. Do you have a family history of cancer?
d. Have you ever worked as a plumber?
e. Were you previously incarcerated?

ANS: A, B, E
When assessing a client with suspected cirrhosis, the nurse should ask about alcohol consumption, including amount and frequency; sexual history and orientation (specifically men having sex with men); illicit drug use; history of tattoos; and history of military service, incarceration, or work as a firefighter, police officer, or health care provider. A family history of cancer and work as a plumber do not put the client at risk for cirrhosis.

DIF: Applying/Application REF: 1176
KEY: Cirrhosis| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse plans care for a client who has hepatopulmonary syndrome. Which interventions should the nurse include in this clients plan of care? (Select all that apply.)
a. Oxygen therapy
b. Prone position
c. Feet elevated on pillows
d. Daily weights
e. Physical therapy

ANS: A, C, D
Care for a client who has hepatopulmonary syndrome should include oxygen therapy, the head of bed elevated at least 30 degrees or as high as the client wants to improve breathing, elevated feet to decrease dependent edema, and daily weights. There is no need to place the client in a prone position, on the clients stomach. Although physical therapy may be helpful to a client who has been hospitalized for several days, physical therapy is not an intervention specifically for hepatopulmonary syndrome.

DIF: Applying/Application REF: 1172
KEY: Cirrhosis| respiratory distress/failure
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. An emergency room nurse assesses a client with potential liver trauma. Which clinical manifestations should alert the nurse to internal bleeding and hypovolemic shock? (Select all that apply.)
a. Hypertension
b. Tachycardia
c. Flushed skin
d. Confusion
e. Shallow respirations

ANS: B, D
Symptoms of hemorrhage and hypovolemic shock include hypotension, tachycardia, tachypnea, pallor, diaphoresis, cool and clammy skin, and confusion.

DIF: Remembering/Knowledge REF: 1185
KEY: Abdominal trauma| emergency nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 59: Care of Patients with Problems of the Biliary System and Pancreas

MULTIPLE CHOICE

1. A nurse cares for a client who has obstructive jaundice. The client asks, Why is my skin so itchy? How should the nurse respond?
a. Bile salts accumulate in the skin and cause the itching.
b. Toxins released from an inflamed gallbladder lead to itching.
c. Itching is caused by the release of calcium into the skin.
d. Itching is caused by a hypersensitivity reaction.

ANS: A
In obstructive jaundice, the normal flow of bile into the duodenum is blocked, allowing excess bile salts to accumulate on the skin. This leads to itching, or pruritus. The other statements are not accurate.

DIF: Understanding/Comprehension REF: 1192
KEY: Cholecystitis
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. After teaching a client who is recovering from laparoscopic cholecystectomy surgery, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?
a. Drinking at least 2 liters of water each day is suggested.
b. I will decrease the amount of fatty foods in my diet.
c. Drinking fluids with my meals will increase bloating.
d. I will avoid concentrated sweets and simple carbohydrates.

ANS: B
After cholecystectomy, clients need a nutritious diet without a lot of excess fat; otherwise a special diet is not recommended for most clients. Good fluid intake is healthy for all people but is not related to the surgery. Drinking fluids between meals helps with dumping syndrome, which is not seen with this procedure. Restriction of sweets is not required.

DIF: Applying/Application REF: 1196
KEY: Cholecystitis| postoperative nursing
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse cares for a client who is recovering from laparoscopic cholecystectomy surgery. The client reports pain in the shoulder blades. How should the nurse respond?
a. Ambulating in the hallway twice a day will help.
b. I will apply a cold compress to the painful area on your back.
c. Drinking a warm beverage can relieve this referred pain.
d. You should cough and deep breathe every hour.

ANS: A
The client who has undergone a laparoscopic cholecystectomy may report free air pain due to retention of carbon dioxide in the abdomen. The nurse assists the client with early ambulation to promote absorption of the carbon dioxide. Cold compresses and drinking a warm beverage would not be helpful. Coughing and deep breathing are important postoperative activities, but they are not related to discomfort from carbon dioxide.

DIF: Applying/Application REF: 1195
KEY: Cholecystitis| postoperative nursing
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. After teaching a client who has a history of cholelithiasis, the nurse assesses the clients understanding.

Which menu selection made by the client indicates the client clearly understands the dietary teaching?
a. Lasagna, tossed salad with Italian dressing, and low-fat milk
b. Grilled cheese sandwich, tomato soup, and coffee with cream
c. Cream of potato soup, Caesar salad with chicken, and a diet cola
d. Roasted chicken breast, baked potato with chives, and orange juice

ANS: D
Clients with cholelithiasis should avoid foods high in fat and cholesterol, such as whole milk, butter, and fried foods. Lasagna, low-fat milk, grilled cheese, cream, and cream of potato soup all have high levels of fat. The meal with the least amount of fat is the chicken breast dinner.

DIF: Applying/Application REF: 1195
KEY: Cholecystitis| nutritional requirements
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse plans care for a client with acute pancreatitis. Which intervention should the nurse include in this clients plan of care to reduce discomfort?
a. Administer morphine sulfate intravenously every 4 hours as needed.
b. Maintain nothing by mouth (NPO) and administer intravenous fluids.
c. Provide small, frequent feedings with no concentrated sweets.
d. Place the client in semi-Fowlers position with the head of bed elevated.

ANS: B
The client should be kept NPO to reduce GI activity and reduce pancreatic enzyme production. IV fluids should be used to prevent dehydration. The client may need a nasogastric tube. Pain medications should be given around the clock and more frequently than every 4 to 6 hours. A fetal position with legs drawn up to the chest will promote comfort.

DIF: Applying/Application REF: 1200
KEY: Pancreatitis| NPO| pain
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. After teaching a client who is prescribed pancreatic enzyme replacement therapy, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. The capsules can be opened and the powder sprinkled on applesauce if needed.
b. I will wipe my lips carefully after I drink the enzyme preparation.
c. The best time to take the enzymes is immediately after I have a meal or a snack.
d. I will not mix the enzyme powder with food or liquids that contain protein.

ANS: C
The enzymes should be taken immediately before eating meals or snacks. If the client cannot swallow the capsules whole, they can be opened up and the powder sprinkled on applesauce, mashed fruit, or rice cereal. The client should wipe his or her lips carefully after drinking the enzyme preparation because the liquid could damage the skin. Protein items will be dissolved by the enzymes if they are mixed together.

DIF: Applying/Application REF: 1202
KEY: Pancreatitis| medication safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

7. A nurse assesses a client who is recovering from an open Whipple procedure. Which action should the nurse perform first?
a. Assess the clients endotracheal tube with 40% FiO2.
b. Insert an indwelling Foley catheter to gravity drainage.
c. Place the clients nasogastric tube to low intermittent suction.
d. Start lactated Ringers solution through an intravenous catheter.

ANS: A
Using the ABCs, airway and oxygenation status should always be assessed first, so checking the endotracheal tube is the first action. Next, the nurse should start the IV line (circulation). After that, the Foley catheter can be inserted and the nasogastric tube can be set.

DIF: Applying/Application REF: 1208
KEY: Whipple procedure| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse cares for a client with end-stage pancreatic cancer. The client asks, Why is this happening to me? How should the nurse respond?
a. I dont know. I wish I had an answer for you, but I dont.
b. Its important to keep a positive attitude for your family right now.
c. Scientists have not determined why cancer develops in certain people.
d. I think that this is a trial so you can become a better person because of it.

ANS: A
The client is not asking the nurse to actually explain why the cancer has occurred. The client may be expressing his or her feelings of confusion, frustration, distress, and grief related to this diagnosis. Reminding the client to keep a positive attitude for his or her family does not address the clients emotions or current concerns. The nurse should validate that there is no easy or straightforward answer as to why the client has cancer. Telling a client that cancer is a trial is untrue and may diminish the client-nurse relationship.

DIF: Applying/Application REF: 1208
KEY: Pancreatic cancer| coping| support MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

9. A nurse prepares to assess the emotional state of a client with end-stage pancreatic cancer. Which action should the nurse take first?
a. Bring the client to a quiet room for privacy.
b. Pull up a chair and sit next to the clients bed.
c. Determine whether the client feels like talking about his or her feelings.
d. Review the health care providers notes about the prognosis for the client.

ANS: C
Before conducting an assessment about the clients feelings, the nurse should determine whether he or she is willing and able to talk about them. If the client is open to the conversation and his or her room is not appropriate, an alternative meeting space may be located. The nurse should be present for the client during this time, and pulling up a chair and sitting with the client indicates that presence. Because the nurse is assessing the clients response to a terminal diagnosis, it is not necessary to have detailed information about the projected prognosis; the nurse knows that the client is facing an end-of-life illness.

DIF: Applying/Application REF: 1208
KEY: Pancreatic cancer| coping| support MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

10. A nurse assesses clients at a community health center. Which client is at highest risk for pancreatic cancer?
a. A 32-year-old with hypothyroidism
b. A 44-year-old with cholelithiasis
c. A 50-year-old who has the BRCA2 gene mutation
d. A 68-year-old who is of African-American ethnicity

ANS: C
Mutations in both the BRCA2 and p16 genes increase the risk for developing pancreatic cancer in a small number of cases. The other factors do not appear to be linked to increased risk.

DIF: Remembering/Knowledge REF: 1205
KEY: Pancreatic cancer| health screening MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse assesses a client who has cholecystitis. Which clinical manifestation indicates that the condition is chronic rather than acute?
a. Temperature of 100.1 F (37.8 C)
b. Positive Murphys sign
c. Light-colored stools
d. Upper abdominal pain after eating

ANS: C
Jaundice, clay-colored stools, and dark urine are more commonly seen with chronic cholecystitis. The other symptoms are seen equally with both chronic and acute cholecystitis.

DIF: Understanding/Comprehension REF: 1193
KEY: Cholecystitis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. A nurse cares for a client who is prescribed patient-controlled analgesia (PCA) after a cholecystectomy. The client states, When I wake up I am in pain. Which action should the nurse take?
a. Administer intravenous morphine while the client sleeps.
b. Encourage the client to use the PCA pump upon awakening.
c. Contact the provider and request a different analgesic.
d. Ask a family member to initiate the PCA pump for the client.

ANS: B
The nurse should encourage the client to use the PCA pump prior to napping and upon awakening. Administering additional intravenous morphine while the client sleeps places the client at risk for respiratory depression. The nurse should also evaluate dosages received compared with dosages requested and contact the provider if the dose or frequency is not adequate. Only the client should push the pain button on a PCA pump.

DIF: Applying/Application REF: 1196
KEY: Cholecystitis| pain| postoperative care
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse cares for a client with acute pancreatitis. The client states, I am hungry. How should the nurse reply?
a. Is your stomach rumbling or do you have bowel sounds?
b. I need to check your gag reflex before you can eat.
c. Have you passed any flatus or moved your bowels?
d. You will not be able to eat until the pain subsides.

ANS: C
Paralytic ileus is a common complication of acute pancreatitis. The client should not eat until this has resolved. Bowel sounds and decreased pain are not reliable indicators of peristalsis. Instead, the nurse should assess for passage of flatus or bowel movement.

DIF: Applying/Application REF: 1197
KEY: Pancreatitis| NPO| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. A nurse prepares to discharge a client with chronic pancreatitis. Which question should the nurse ask to ensure safety upon discharge?
a. Do you have a one- or two-story home?
b. Can you check your own pulse rate?
c. Do you have any alcohol in your home?
d. Can you prepare your own meals?

ANS: A
A client recovering from chronic pancreatitis should be limited to one floor until strength and activity increase. The client will need a bathroom on the same floor for frequent defecation. Assessing pulse rate and preparation of meals is not specific to chronic pancreatitis. Although the client should be encouraged to stop drinking alcoholic beverages, asking about alcohol availability is not adequate to assess this clients safety.

DIF: Applying/Application REF: 1201
KEY: Pancreatitis| patient education
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse assesses clients on the medical-surgical unit. Which client should the nurse identify as at high risk for pancreatic cancer?
a. A 26-year-old with a body mass index of 21
b. A 33-year-old who frequently eats sushi
c. A 48-year-old who often drinks wine
d. A 66-year-old who smokes cigarettes

ANS: D
Risk factors for pancreatic cancer include obesity, older age, high intake of red meat, and cigarette smoking. Sushi and wine intake are not risk factors for pancreatic cancer.

DIF: Applying/Application REF: 1205
KEY: Pancreatic cancer| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16. A nurse assesses a client who is recovering from a Whipple procedure. Which assessment finding alerts the nurse to urgently contact the health care provider?
a. Drainage from a fistula
b. Absent bowel sounds
c. Pain at the incision site
d. Nasogastric (NG) tube drainage

ANS: A
Complications of a Whipple procedure include secretions that drain from a fistula and peritonitis. Absent bowel sounds, pain at the incision site, and NG tube drainage are normal postoperative findings.

DIF: Applying/Application REF: 1207
KEY: Whipple procedure| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17. A nurse cares for a client who is recovering from an open Whipple procedure. Which action should the nurse take?
a. Clamp the nasogastric tube.
b. Place the client in semi-Fowlers position.
c. Assess vital signs once every shift.
d. Provide oral rehydration.

ANS: B
Postoperative care for a client recovering from an open Whipple procedure should include placing the client in a semi-Fowlers position to reduce tension on the suture line and anastomosis sites, setting the nasogastric tube to low suction to remove free air buildup and pressure, assessing vital signs frequently to assess fluid and electrolyte complications, and providing intravenous fluids.

DIF: Applying/Application REF: 1207
KEY: Whipple procedure| postoperative nursing

MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse assesses a client who is recovering from a Whipple procedure. Which clinical manifestations alert the nurse to a complication from this procedure? (Select all that apply.)
a. Clay-colored stools
b. Substernal chest pain
c. Shortness of breath
d. Lack of bowel sounds or flatus
e. Urine output of 20 mL/6 hr

ANS: B, C, D, E
Myocardial infarction (chest pain), pulmonary embolism (shortness of breath), adynamic ileus (lack of bowel sounds or flatus), and renal failure (urine output of 20 mL/6 hr) are just some of the complications for which the nurse must assess the client after the Whipple procedure. Clay-colored stools are associated with cholecystitis and are not a complication of a Whipple procedure.

DIF: Understanding/Comprehension REF: 1207
KEY: Whipple procedure| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse assesses a client with cholelithiasis. Which assessment findings should the nurse identify as contributors to this clients condition? (Select all that apply.)
a. Body mass index of 46
b. Vegetarian diet
c. Drinking 4 ounces of red wine nightly
d. Pregnant with twins
e. History of metabolic syndrome
f. Glycosylated hemoglobin level of 15%

ANS: A, D, F
Obesity, pregnancy, and diabetes are all risk factors for the development of cholelithiasis. A diet low in saturated fats and moderate alcohol intake may decrease the risk. Although metabolic syndrome is a precursor to diabetes, it is not a risk factor for cholelithiasis. The client should be informed of the connection.

DIF: Remembering/Knowledge REF: 1192
KEY: Cholecystitis| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse teaches a client who is recovering from acute pancreatitis. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. Take a 20-minute walk at least 5 days each week.
b. Attend local Alcoholics Anonymous (AA) meetings weekly.
c. Choose whole grains rather than foods with simple sugars.
d. Use cooking spray when you cook rather than margarine or butter.
e. Stay away from milk and dairy products that contain lactose.
f. We can talk to your doctor about a prescription for nicotine patches.

ANS: B, D, F
The client should be advised to stay sober, and AA is a great resource. The client requires a low-fat diet, and cooking spray is low in fat compared with butter or margarine. If the client smokes, he or she must stop because nicotine can precipitate an exacerbation. A nicotine patch may help the client quit smoking. The client must rest until his or her strength returns. The client requires high carbohydrates and calories for healing; complex carbohydrates are not preferred over simple ones. Dairy products do not cause a problem.

DIF: Applying/Application REF: 1201
KEY: Pancreatitis| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. A nurse cares for a client who presents with tachycardia and prostration related to biliary colic. Which actions should the nurse take? (Select all that apply.)
a. Contact the provider immediately.
b. Lower the head of the bed.
c. Decrease intravenous fluids.
d. Ask the client to bear down.
e. Administer prescribed opioids.

ANS: A, B
Clients who are experiencing biliary colic may present with tachycardia, pallor, diaphoresis, prostration, or other signs of shock. The nurse should stay with the client, lower the clients head, and contact the provider or Rapid Response Team for immediate assistance. Treatment for shock usually includes intravenous fluids; therefore, decreasing fluids would be an incorrect intervention. The clients tachycardia is a result of shock, not pain. Performing the vagal maneuver or administering opioids could knock out the clients compensation mechanism.

DIF: Applying/Application REF: 1193
KEY: Cholecystitis| shock
MSC: Integrated Process: Nursing Process: Intervention
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse plans care for a client who has acute pancreatitis and is prescribed nothing by mouth (NPO). With which health care team members should the nurse collaborate to provide appropriate nutrition to this client? (Select all that apply.)
a. Registered dietitian
b. Nursing assistant
c. Clinical pharmacist
d. Certified herbalist
e. Health care provider

ANS: A, C, E
Clients who are prescribed NPO while experiencing an acute pancreatitis episode may need enteral or parenteral nutrition. The nurse should collaborate with the registered dietitian, clinical pharmacist, and health care provider to plan and implement the more appropriate nutritional interventions. The nursing assistant and certified herbalist would not assist with this clinical decision.

DIF: Applying/Application REF: 1201
KEY: Pancreatitis| collaboration| interdisciplinary health care team
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse collaborates with an unlicensed assistive personnel (UAP) to provide care for a client who is in the healing phase of acute pancreatitis. Which statements focused on nutritional requirements should the nurse include when delegating care for this client? (Select all that apply.)
a. Do not allow the client to eat between meals.
b. Make sure the client receives a protein shake.
c. Do not allow caffeine-containing beverages.
d. Make sure the foods are bland with little spice.
e. Do not allow high-carbohydrate food items.

ANS: B, C, D
During the healing phase of pancreatitis, the client should be provided small, frequent, moderate- to high-carbohydrate, high-protein, low-fat meals. Protein shakes can be provided to supplement the diet. Foods and beverages should not contain caffeine and should be bland.

DIF: Applying/Application REF: 1201
KEY: Pancreatitis| nutritional requirements| collaboration| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse cares for a client with pancreatic cancer who is prescribed implanted radioactive iodine seeds. Which actions should the nurse take when caring for this client? (Select all that apply.)
a. Dispose of dirty linen in a red biohazard bag.
b. Place the client in a private room.
c. Wear a lead apron when providing client care.
d. Bundle care to minimize exposure to the client.
e. Initiate Transmission-Based Precautions.

ANS: B, C, D
The client should be placed in a private room and dirty linens kept in the clients room until the radiation source is removed. The nurse should wear a lead apron while providing care, ensuring that the apron always faces the client. The nurse should also bundle care to minimize exposure to the client. Transmission-Based Precautions will not protect the nurse from the implanted radioactive iodine seeds.

DIF: Applying/Application REF: 1206
KEY: Pancreatic cancer| radiation therapy
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

SHORT ANSWER

1. A nurse cares for a client with acute pancreatitis who is prescribed gentamicin (Garamycin) 3 mg/kg/day in 3 divided doses. The client weighs 264 lb. How many milligrams should the nurse administer for each dose? (Record your answer using a whole number.) ____ mg/dose

ANS:
120 mg/dose
264 lb (2.2 lb/kg) = 120 kg.
3 mg/kg/day 120 kg = 360 mg/day.
360 mg/day 3 divided doses = 120 mg/dose.

DIF: Applying/Application REF: 1196
KEY: Medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse cares for a client who is prescribed 4 mg of calcium gluconate to infuse over 5 hours. The pharmacy provides 2 premixed infusion bags with 2 mg of calcium gluconate in 100 mL of D5W. At what rate should the nurse administer this medication? (Record your answer using a whole number.) ____ mL/hr

ANS:
40 mL/hr

DIF: Applying/Application REF: 1196
KEY: Medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 60: Care of Patients with Malnutrition: Undernutrition and Obesity

MULTIPLE CHOICE

1. A client is in the family practice clinic. Today the client weighs 186.4 pounds (84.7 kg). Six months ago the client weighed 211.8 pounds (96.2 kg). What action by the nurse is best?
a. Ask the client if the weight loss was intentional.
b. Determine if there are food allergies or intolerances.
c. Perform a comprehensive nutritional assessment.
d. Perform a rapid bedside blood glucose test.

ANS: A
This client has had a 12% weight loss. The nurse first determines if the weight loss was intentional. If not, then the nurse proceeds to a comprehensive nutritional assessment. Food intolerances are part of this assessment. Depending on risk factors and other findings, a blood glucose test may be warranted.

DIF: Applying/Application REF: 1215
KEY: Nutrition| nutritional disorders| nutritional assessment| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nursing student is studying nutritional problems and learns that kwashiorkor is distinguished from marasmus with which finding?
a. Deficit of calories
b. Lack of all nutrients
c. Specific lack of protein
d. Unknown cause of malnutrition

ANS: C
Kwashiorkor is a lack of protein when total calories are adequate. Marasmus is a caloric malnutrition.

DIF: Remembering/Knowledge REF: 1215
KEY: Nutritional disorders| nutritional assessment
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse is reviewing laboratory values for several clients. Which value causes the nurse to conduct nutritional assessments as a priority?
a. Albumin: 3.5 g/dL
b. Cholesterol: 142 mg/dL
c. Hemoglobin: 9.8 mg/dL
d. Prealbumin: 28 mg/dL

ANS: B
A cholesterol level below 160 mg/dL is a possible indicator of malnutrition, so this client would be at highest priority for a nutritional assessment. The albumin and prealbumin levels are normal. The low hemoglobin could be from several problems, including dietary deficiencies, hemodilution, and bleeding.

DIF: Remembering/Knowledge REF: 1218
KEY: Nutritional disorders| nutritional assessment| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. A client is receiving bolus feedings through a Dobhoff tube. What action by the nurse is most important?
a. Auscultate lung sounds after each feeding.
b. Check tube placement before each feeding.
c. Check tube placement every 8 hours.

d. Weigh the client daily on the same scale.

ANS: B
For bolus feedings, the nurse checks placement of the tube per institutional policy prior to each feeding, which is more often than every 8 hours during the day. Auscultating lung sounds is also important, but this will indicate a complication that has already occurred. Weighing the client is important to determine if nutritional goals are being met.

DIF: Applying/Application REF: 1222
KEY: Nutritional disorders| tube feedings| equipment safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. A client having a tube feeding begins vomiting. What action by the nurse is most appropriate?
a. Administer an antiemetic.
b. Check the clients gastric residual.
c. Hold the feeding until the nausea subsides.
d. Reduce the rate of the tube feeding by half.

ANS: C
The nurse should hold the feeding until the nausea and vomiting have subsided and consult with the provider on the rate at which to restart the feeding. Giving an antiemetic is not appropriate. After vomiting, a gastric residual will not be accurate. The nurse should not continue to feed the client while he or she is vomiting.

DIF: Applying/Application REF: 1223
KEY: Nutritional disorders| tube feedings
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse is caring for a client receiving enteral feedings through a Dobhoff tube. What action by the nurse is best to prevent hyperosmolarity?
a. Administer free-water boluses.
b. Change the clients formula.
c. Dilute the clients formula.
d. Slow the rate of infusion.

ANS: A
Proteins and sugar molecules in the enteral feeding product contribute to dehydration due to increased osmolarity. The nurse can administer free-water boluses after consulting with the provider on the appropriate amount and timing of the boluses, or per protocol. The client may not be able to switch formulas. Diluting the formula is not appropriate. Slowing the rate of the infusion will not address the problem.

DIF: Analyzing/Analysis REF: 1221
KEY: Nutritional disorders| tube feedings
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A nurse is caring for four clients receiving enteral tube feedings. Which client should the nurse see first?
a. Client with a blood glucose level of 138 mg/dL
b. Client with foul-smelling diarrhea
c. Client with a potassium level of 2.6 mEq/L
d. Client with a sodium level of 138 mEq/L

ANS: C
The potassium is critically low, perhaps due to hyperglycemia-induced hyperosmolarity. The nurse should see this client first. The blood glucose reading is high, but not extreme. The sodium is normal. The client with the diarrhea should be seen last to avoid cross-contamination.

DIF: Applying/Application REF: 1223

KEY: Nutritional disorders| tube feedings| electrolyte imbalances
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse and a registered dietitian are assessing clients for partial parenteral nutrition (PPN). For which client would the nurse suggest another route of providing nutrition?
a. Client with congestive heart failure
b. Older client with dementia
c. Client who has multiorgan failure
d. Client who is post gastric resection

ANS: A
Clients receiving PPN typically get large amounts of fluid volume, making the client with heart failure a poor candidate. The other candidates are appropriate for this type of nutritional support.

DIF: Analyzing/Analysis REF: 1223
KEY: Nutritional disorders| heart failure| parenteral nutrition| nursing assessment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9. A client is receiving total parenteral nutrition (TPN). On assessment, the nurse notes the clients pulse is 128 beats/min, blood pressure is 98/56 mm Hg, and skin turgor is dry. What action should the nurse perform next?
a. Assess the 24-hour fluid balance.
b. Assess the clients oral cavity.
c. Prepare to hang a normal saline bolus.
d. Turn up the infusion rate of the TPN.

ANS: A
This client has clinical indicators of dehydration, so the nurse calculates the clients 24-hour intake, output, and fluid balance. This information is then reported to the provider. The clients oral cavity assessment may or may not be consistent with dehydration. The nurse may need to give the client a fluid bolus, but not as an independent action. The clients dehydration is most likely due to fluid shifts from the TPN, so turning up the infusion rate would make the problem worse, and is not done as an independent action.

DIF: Analyzing/Analysis REF: 1224
KEY: Nutritional disorders| parenteral nutrition| intake and output
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

10. A client tells the nurse about losing weight and regaining it multiple times. Besides eating and exercising habits, for what additional data should the nurse assess as the priority?
a. Economic ability to join a gym
b. Food allergies and intolerances
c. Psychosocial influences on weight
d. Reasons for wanting to lose weight

ANS: C
While all topics might be important to assess, people who lose and gain weight in cycles often are depressed or have poor self-esteem, which has a negative effect on weight-loss efforts. The nurse assesses the clients psychosocial status as the priority.

DIF: Applying/Application REF: 1226
KEY: Nutritional disorders| psychosocial response| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

11. A client asks the nurse about drugs for weight loss. What response by the nurse is best?
a. All weight-loss drugs can cause suicidal ideation.
b. No drugs are currently available for weight loss.

c. Only over-the-counter medications are available.
d. There are three drugs currently approved for this.

ANS: D
There are three drugs available by prescription for weight loss, including orlistat (Xenical), lorcaserin (Belviq), and phentermine-topiramate (Qsymia). Suicidal thoughts are possible with lorcaserin and phentermine-topiramate. Orlistat is also available in a reduced-dose over-the-counter formulation.

DIF: Understanding/Comprehension REF: 1228
KEY: Nutritional disorders| obesity| anorectic drugs
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A client just returned to the surgical unit after a gastric bypass. What action by the nurse is the priority?
a. Assess the clients pain.
b. Check the surgical incision.
c. Ensure an adequate airway.
d. Program the morphine pump.

ANS: C
All actions are appropriate care measures for this client; however, airway is always the priority. Bariatric clients tend to have short, thick necks that complicate airway management.

DIF: Applying/Application REF: 1230
KEY: Nutritional disorders| obesity| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

13. A morbidly obese client is admitted to a community hospital that does not typically care for bariatric-sized clients. What action by the nurse is most appropriate?
a. Assess the clients readiness to make lifestyle changes.
b. Ensure adequate staff when moving the client.
c. Leave siderails down to prevent pressure ulcers.
d. Reinforce the need to be sensitive to the client.

ANS: B
Many hospitals that see bariatric-sized clients have appropriate equipment for this population. A hospital that does not typically see these clients is less likely to have appropriate equipment, putting staff and client safety at risk. The nurse ensures enough staffing is available to help with all aspects of mobility. It may or may not be appropriate to assess the clients willingness to make lifestyle changes. Leaving the siderails down may present a safety hazard. The staff should be sensitive to this clients situation, but safety takes priority.

DIF: Applying/Application REF: 1229
KEY: Nutritional disorders| obesity| patient safety| staff safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

14. A client is in the bariatric clinic 1 month after having gastric bypass surgery. The client is crying and says I didnt know it would be this hard to live like this. What response by the nurse is best?
a. Assess the clients coping and support systems.
b. Inform the client that things will get easier.
c. Re-educate the client on needed dietary changes.
d. Tell the client lifestyle changes are always hard.

ANS: A
The nurse should assess this clients coping styles and support systems in order to provide holistic care. The other options do not address the clients distress.

DIF: Applying/Application REF: 1231

KEY: Nutritional disorders| obesity| psychosocial response| coping
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

15. A client has been prescribed lorcaserin (Belviq). What teaching is most appropriate?
a. Increase the fiber and water in your diet.
b. Reduce fat to less than 30% each day.
c. Report dry mouth and decreased sweating.
d. Lorcaserin may cause loose stools for a few days.

ANS: A
This drug can cause constipation, so the client should increase fiber and water in the diet to prevent this from occurring. Reducing fat in the diet is important with orlistat. Lorcaserin can cause dry mouth but not decreased sweating. Loose stools are common with orlistat.

DIF: Understanding/Comprehension REF: 1228
KEY: Nutritional disorders| obesity| patient education| anorectic drugs
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. Several nurses have just helped a morbidly obese client get out of bed. One nurse accesses the clients record because I just have to know how much she weighs! What action by the clients nurse is most appropriate?
a. Make an anonymous report to the charge nurse.
b. State That is a violation of client confidentiality.
c. Tell the nurse Dont look; Ill tell you her weight.
d. Walk away and ignore the other nurses behavior.

ANS: B
Ethical practice requires the nurse to speak up and tell the other nurse that he or she is violating client confidentiality rules. The other responses do not address this concern.

DIF: Applying/Application REF: 1227
KEY: Ethics| confidentiality
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17. A nurse attempted to assist a morbidly obese client back to bed and had immediate pain in the lower back. What action by the nurse is most appropriate?
a. Ask another nurse to help next time.
b. Demand better equipment to use.
c. Fill out and file a variance report.
d. Refuse to assist the client again.

ANS: C
The nurse should complete a variance report per agency policy. Asking another nurse to help and requesting better equipment are both good ideas, but the nurse may have an injury that needs care. It would be unethical tc refuse to care for this client again.

DIF: Applying/Application REF: 1225
KEY: Nutritional disorders| obesity| variance report
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

18. A nurse is caring for a morbidly obese client. What comfort measure is most important for the nurse to delegate to the unlicensed assistive personnel (UAP)?
a. Designating quiet time so the client can rest
b. Ensuring siderails are not causing excess pressure
c. Providing oral care before and after meals and snacks

d. Relaying any reports of pain to the registered nurse

ANS: B
All actions are good for client comfort, but when dealing with an obese client, the staff should take extra precautions, such as ensuring the siderails are not putting pressure on the clients tissues. The other options are appropriate for any client, and are not specific to obese clients.

DIF: Applying/Application REF: 1225
KEY: Nutritional disorders| obesity| comfort measures| unlicensed assistive personnel (UAP) MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

19. A client is awaiting bariatric surgery in the morning. What action by the nurse is most important?
a. Answering questions the client has about surgery
b. Beginning venous thromboembolism prophylaxis
c. Informing the client that he or she will be out of bed tomorrow
d. Teaching the client about needed dietary changes

ANS: B
Morbidly obese clients are at high risk of venous thromboembolism and should be started on a regimen to prevent this from occurring as a priority. Answering questions about the surgery is done by the surgeon. Teaching is important, but safety comes first.

DIF: Applying/Application REF: 1230
KEY: Nutritional disorders| obesity| venous thromboembolism
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

20. A client is receiving total parenteral nutrition (TPN). What action by the nurse is most important?
a. Assessing blood glucose as directed
b. Changing the IV dressing each day
c. Checking the TPN with another nurse
d. Performing appropriate hand hygiene

ANS: D
Clients on TPN are at high risk for infection. The nurse performs appropriate hand hygiene as a priority intervention. Checking blood glucose is also an important measure, but preventing infection takes priority. The IV dressing is changed every 48 to 72 hours. TPN does not need to be double-checked with another nurse.

DIF: Applying/Application REF: 1224
KEY: Nutritional disorders| parenteral nutrition| infection control
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

21. A nurse is weighing and measuring a client with severe kyphosis. What is the best method to obtain this clients height?
a. Add the trunk and leg measurements.
b. Ask the client how tall he or she is.
c. Estimate by measuring clothing.
d. Use knee-height calipers.

ANS: D
A sliding blade knee-height caliper is used to obtain the height of a client who cannot stand upright, such as those with kyphosis or lower extremity contractures. The other methods will not yield accurate data.

DIF: Remembering/Knowledge REF: 1215
KEY: Nutritional assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. The nurse understands that malnutrition can occur in hospitalized clients for several reasons. Which are possible reasons for this to occur? (Select all that apply.)
a. Cultural food preferences
b. Family bringing snacks
c. Increased need for nutrition
d. Need for NPO status
e. Staff shortages

ANS: A, C, D, E
Many factors increase the hospitalized clients risk for nutritional deficits. Cultural food preferences may make hospital food unpalatable. Ill clients have increased nutritional needs but may be NPO for testing or treatment, or have a loss of appetite from their illness. Staff shortages impact clients who need to be fed or assisted with meals. The family may bring snacks that are either healthy or unhealthy, so without further information, the nurse cannot assume the snacks are leading to malnutrition.

DIF: Remembering/Knowledge REF: 1216
KEY: Nutritional disorders
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse has delegated feeding a client to an unlicensed assistive personnel (UAP). What actions does the nurse include in the directions to the UAP? (Select all that apply.)
a. Allow 30 minutes for eating so food doesnt get spoiled.
b. Assess the clients mouth while providing premeal oral care.
c. Ensure warm and cold items stay at appropriate temperatures.
d. Remove bedpans, soiled linens, and other unpleasant items.
e. Sit with the client, making the atmosphere more relaxed.

ANS: C, D, E
The UAP should make sure food items remain at the appropriate temperatures for maximum palatability. Removing items such as bedpans, urinals, or soiled linens helps make the atmosphere more conducive to eating. The UAP should sit, not stand, next to the client to promote a relaxing experience. The client, especially older clients who tend to eat more slowly, should not be rushed. Assessment is done by the nurse.

DIF: Understanding/Comprehension REF: 1219
KEY: Nutritional disorders| nutrition| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

3. A nurse is designing a community education program to meet the Healthy People 2020 objectives for nutrition and weight status. What information about these goals does the nurse use to plan this event? (Select all that apply.)
a. Decrease the amount of fruit to 1.1 cups/1000 calories.
b. Increase the amount of vegetables to 1.1 cups/1000 calories.
c. Increase the number of adults at a healthy weight by 25%.
d. Reduce the number of adults who are obese by 10%.
e. Reduce the consumption of saturated fat by nearly 10%.

ANS: B, D, E
Some of the goals in this initiative include increasing fruit consumption to 0.9 cups/1000 calories, increasing vegetable intake to 1.1 cups/1000 calories, increasing the number of people at a healthy weight by 10%, decreasing the number of adults who are obese by 10%, and reducing the consumption of saturated fats by 9.5%.

DIF: Remembering/Knowledge REF: 1222
KEY: Nutritional disorders| obesity| health promotion
MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Health Promotion and Maintenance

4. A clients small-bore feeding tube has become occluded after the nurse administered medications. What actions by the nurse are best? (Select all that apply.)
a. Attempt to dissolve the clog by instilling a cola product.
b. Determine if any of the medications come in liquid form.
c. Flush the tube before and after administering medications.
d. Mix all medications in the formula and use a feeding pump.
e. Try to flush the tube with 30 mL of water and gentle pressure.

ANS: B, C, E
If the tube is obstructed, use a 50-mL syringe and gentle pressure to attempt to open the tube. Cola products should not be used unless water is not effective. To prevent future problems, determine if any of the medications can be dispensed in liquid form and flush the tube with water before and after medication administration. Do not mix medications with the formula.

DIF: Remembering/Knowledge REF: 1222
KEY: Nutritional disorders| tube feedings| medication administration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. When working with older adults to promote good nutrition, what actions by the nurse are most appropriate? (Select all that apply.)
a. Allow uninterrupted time for eating.
b. Assess dentures for appropriate fit.
c. Ensure the client has glasses on when eating.
d. Provide salty foods that the client can taste.
e. Serve high-calorie, high-protein snacks.

ANS: A, B, C, E
Older adults need unhurried and uninterrupted time for eating. Dentures should fit appropriately and glasses, if used, should be on. High-calorie, high-protein snacks are a good choice. Salty snacks are not recommended because all adults should limit sodium in their diets.

DIF: Applying/Application REF: 1217
KEY: Nutritional disorders| older adult| nutrition
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

SHORT ANSWER

1. A client weighs 228 pounds (103.6 kg) and is 53 (160 cm) tall. What is this clients body mass index (BMI)? (Record your answer using a decimal rounded up to the nearest tenth.) _____

ANS:
40.4
Using the formula :
, or 40.4 rounded up to the nearest tenth.

DIF: Applying/Application REF: 1215
KEY: Nutritional assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A client wants to lose 1.5 pounds a week. After reviewing a diet history, the nurse determines the client typically eats 2450 calories a day. What should the clients calorie goal be to achieve this weight loss? (Record your answer using a whole number.) __ calories/day

ANS:
1700 calories/day
To encourage a weight loss of 1 pound (2.2 kg) a week, 500 calories per day would be subtracted. To encourage a weight loss of 2 pounds (4.4 kg) a week, 1000 calories each day are subtracted. In this scenario, to lose 1.5 pounds a week the client needs to cut 750 calories per day from the diet: 2450 750 = 1700 calories.

DIF: Applying/Application REF: 1228
KEY: Nutritional disorders| nutritional assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

3. A client is receiving continuous tube feeding at 70 mL/hr. When the bag is empty, how much formula does the nurse add? (Record your answer using a whole number.) _____ mL

ANS:
280 mL
The nurse never adds more than 4 hours worth of formula to a hanging bag of enteral feedings. 70 mL/hr 4 hr = 280 mL.

DIF: Applying/Application REF: 1221
KEY: Nutritional disorders| tube feedings
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 61: Assessment of the Endocrine System

MULTIPLE CHOICE

1. A nurse cares for a client who is prescribed a drug that blocks a hormones receptor site. Which therapeutic effect should the nurse expect?
a. Greater hormone metabolism
b. Decreased hormone activity
c. Increased hormone activity
d. Unchanged hormone response

ANS: B
Hormones cause activity in the target tissues by binding with their specific cellular receptor sites, thereby changing the activity of the cell. When receptor sites are occupied by other substances that block hormone binding, the cells response is the same as when the level of the hormone is decreased.

DIF: Understanding/Comprehension REF: 1234
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse cares for a client with a deficiency of aldosterone. Which assessment finding should the nurse correlate with this deficiency?
a. Increased urine output
b. Vasoconstriction
c. Blood glucose of 98 mg/dL
d. Serum sodium of 144 mEq/L

ANS: A
Aldosterone, the major mineralocorticoid, maintains extracellular fluid volume. It promotes sodium and water reabsorption and potassium excretion in the kidney tubules. A client with an aldosterone deficiency will have increased urine output. Vasoconstriction is not related. These sodium and glucose levels are normal; in aldosterone deficiency, the client would have hyponatremia and hyperkalemia.

DIF: Applying/Application REF: 1237
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse cares for a client with excessive production of thyrocalcitonin (calcitonin). For which electrolyte imbalance should the nurse assess?
a. Potassium
b. Sodium
c. Calcium
d. Magnesium

ANS: C
Parafollicular cells produce thyrocalcitonin (calcitonin), which regulates serum calcium levels. Calcitonin has no impact on potassium, sodium, or magnesium balances.

DIF: Applying/Application REF: 1238
KEY: Endocrine system| assessment/diagnostic examination| electrolyte imbalance
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A nurse assesses a client who is prescribed a medication that stimulates beta1 receptors. Which assessment finding should alert the nurse to urgently contact the health care provider?
a. Heart rate of 50 beats/min
b. Respiratory rate of 18 breaths/min

c. Oxygenation saturation of 92%
d. Blood pressure of 144/69 mm Hg

ANS: A
Stimulation of beta1 receptor sites in the heart has positive chronotropic and inotropic actions. The nurse expects an increase in heart rate and increased cardiac output. The client with a heart rate of 50 beats/min would be cause for concern because this would indicate that the client was not responding to the medication. The other vital signs are within normal limits and do not indicate a negative response to the medication.

DIF: Applying/Application REF: 1238
KEY: Endocrine system| medications| adverse effects
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. A nurse prepares to palpate a clients thyroid gland. Which action should the nurse take when performing this assessment?
a. Stand in front of the client instead of behind the client.
b. Ask the client to swallow after palpating the thyroid.
c. Palpate the right lobe with the nurses left hand.
d. Place the client in a sitting position with the chin tucked down.

ANS: D
The client should be in a sitting position with the chin tucked down as the examiner stands behind the client. The nurse feels for the thyroid isthmus while the client swallows and turns the head to the right, and the nurse palpates the right lobe with the right hand. The technique is repeated in the opposite fashion for the left lobe.

DIF: Understanding/Comprehension REF: 1242
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse collaborates with an unlicensed assistive personnel (UAP) to provide care for a client who is prescribed a 24-hour urine specimen collection. Which statement should the nurse include when delegating this activity to the UAP?
a. Note the time of the clients first void and collect urine for 24 hours.
b. Add the preservative to the container at the end of the test.
c. Start the collection by saving the first urine of the morning.
d. It is okay if one urine sample during the 24 hours is not collected.

ANS: A
The collection of a 24-hour urine specimen is often delegated to a UAP. The nurse must ensure that the UAP understands the proper process for collecting the urine. The 24-hour urine collection specimen is started after the clients first urination. The first urine specimen is discarded because there is no way to know how long it has been in the bladder, but the time of the clients first void is noted. The client adds all urine voided after that first discarded specimen during the next 24 hours. When the 24-hour mark is reached, the client voids one last time and adds this specimen to the collection. The preservative, if used, must be added to the container at the beginning of the collection. All urine samples need to be collected for the test results to be accurate.

DIF: Applying/Application REF: 1242
KEY: Endocrine system| supervision| delegation| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse assesses a female client who presents with hirsutism. Which question should the nurse ask when assessing this client?
a. How do you plan to pay for your treatments?
b. How do you feel about yourself?
c. What medications are you prescribed?
d. What are you doing to prevent this from happening?

ANS: B
Hirsutism, or excessive hair growth on the face and body, can result from endocrine disorders. This may cause a disruption in body image, especially for female clients. The nurse should inquire into the clients body image and self-perception. Asking about the clients financial status or current medications does not address the clients immediate problem. The client is not doing anything to herself to cause the problem, nor can the client prevent it from happening.

DIF: Applying/Application REF: 1241
KEY: Endocrine system| assessment/diagnostic examination| psychosocial response
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

8. A nurse teaches a client who has been prescribed a 24-hour urine collection to measure excreted hormones. The client asks, Why do I need to collect urine for 24 hours instead of providing a random specimen? How should the nurse respond?
a. This test will assess for a hormone secreted on a circadian rhythm.
b. The hormone is diluted in urine; therefore, we need a large volume.
c. We are assessing when the hormone is secreted in large amounts.
d. To collect the correct hormone, you need to urinate multiple times.

ANS: A
Some hormones are secreted in a pulsatile, or circadian, cycle. When testing for these substances, a collection that occurs over 24 hours will most accurately reflect hormone secretion. Dilution of hormones in urine, secretion of hormone amounts, and ability to collect the correct hormone are not reasons to complete a 24-hour urine test.

DIF: Applying/Application REF: 1243
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A nurse plans care for an older adult who is admitted to the hospital for pneumonia. The client has no known drug allergies and no significant health history. Which action should the nurse include in this clients plan of care?
a. Initiate Airborne Precautions.
b. Offer fluids every hour or two.
c. Place an indwelling urinary catheter.
d. Palpate the clients thyroid gland.

ANS: B
A normal age-related endocrine change is decreased antidiuretic hormone (ADH) production. This results in a more diluted urine output, which can lead to dehydration. If no contraindications are known, the nurse should offer (or delegate) the client something to drink at least every 2 hours. A client with simple pneumonia would not require Airborne Precautions. Indwelling urinary catheterization is not necessary for this client and would increase the clients risk for infection. The nurse should plan a toileting schedule and assist the client to the bathroom if needed. Palpating the clients thyroid gland is a part of a comprehensive examination but is not specifically related to this client.

DIF: Applying/Application REF: 1240
KEY: Endocrine system| hydration
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse cares for a client who is prescribed a 24-hour urine collection. The unlicensed assistive personnel (UAP) reports that, while pouring urine into the collection container, some urine splashed his hand. Which action should the nurse take next?
a. Ask the UAP if he washed his hands afterward.
b. Have the UAP fill out an incident report.

c. Ask the laboratory if the container has preservative in it.
d. Send the UAP to Employee Health right away.

ANS: A
For safety, the nurse should find out if the UAP washed his or her hands. The UAP should do this for two reasons. First, it is part of Standard Precautions to wash hands after client care. Second, if the container did have preservative in it, this would wash it away. The preservative may be caustic to the skin. The nurse can call the laboratory while the UAP is washing hands, if needed. The UAP would then need to fill out an incident or exposure report and may or may not need to go to Employee Health. The UAP also needs further education on Standard Precautions, which include wearing gloves.

DIF: Applying/Application REF: 1242
KEY: Endocrine system| delegation| supervision| infection control| unlicensed assistive personnel (UAP) MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A nurse evaluates laboratory results for a male client who reports fluid secretion from his breasts. Which hormone value should the nurse assess first?
a. Posterior pituitary hormones
b. Adrenal medulla hormones
c. Anterior pituitary hormones
d. Parathyroid hormone

ANS: C
Breast fluid and milk production are induced by the presence of prolactin, secreted from the anterior pituitary gland. The other hormones would not cause fluid secretion from the clients breast.

DIF: Applying/Application REF: 1235
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

12. A nurse cares for a client who has excessive catecholamine release. Which assessment finding should the nurse correlate with this condition?
a. Decreased blood pressure
b. Increased pulse
c. Decreased respiratory rate
d. Increased urine output

ANS: B
Catecholamines are responsible for the fight-or-flight stress response. Activation of the sympathetic nervous system can be correlated with tachycardia. Catecholamines do not decrease blood pressure or respiratory rate, nor do they increase urine output.

DIF: Applying/Application REF: 1238
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. A nurse assesses a client diagnosed with adrenal hypofunction. Which client statement should the nurse correlate with this diagnosis?
a. I have a terrible craving for potato chips.
b. I cannot seem to drink enough water.
c. I no longer have an appetite for anything.
d. I get hungry even after eating a meal.

ANS: A
The nurse correlates a clients salt craving with adrenal hypofunction. Excessive thirst is related to diabetes insipidus or diabetes mellitus. Clients who have hypothyroidism often have a decrease in appetite. Excessive

hunger is associated with diabetes mellitus.

DIF: Applying/Application REF: 1240
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

14. A nurse teaches an older adult with a decreased production of estrogen. Which statement should the nurse include in this clients teaching to decrease injury?
a. Drink at least 2 liters of fluids each day.
b. Walk around the neighborhood for daily exercise.
c. Bathe your perineal area twice a day.
d. You should check your blood glucose before meals.

ANS: B
An older adult client with decreased production of estrogen is at risk for decreased bone density and fractures. The nurse should encourage the client to participate in weight-bearing exercises such as walking. Drinking fluids and performing perineal care will decrease vaginal drying but not decrease injury. Older adults often have a decreased glucose tolerance, but this is not related to a decrease in estrogen.

DIF: Applying/Application REF: 1240
KEY: Endocrine system| safety| exercise MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

15. A nurse cares for a client who is prescribed a serum catecholamine test. Which action should the nurse take when obtaining the sample?
a. Discard the first sample and then begin the collection.
b. Draw the blood sample after the client eats breakfast.
c. Place the sample on ice and send to the laboratory immediately.
d. Add preservatives before sending the sample to the laboratory.

ANS: C
A blood sample for catecholamine must be placed on ice and taken to the laboratory immediately. This sample is not urine, and therefore the first sample should not be discarded nor should preservatives be added to the sample. The nurse should use the appropriate tube and obtain the sample based on which drugs are administered, not dietary schedules.

DIF: Applying/Application REF: 1242
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse cares for clients with hormone disorders. Which are common key features of hormones? (Select all that apply.)
a. Hormones may travel long distances to get to their target tissues.
b. Continued hormone activity requires continued production and secretion.
c. Control of hormone activity is caused by negative feedback mechanisms.
d. Most hormones are stored in the target tissues for use later.
e. Most hormones cause target tissues to change activities by changing gene activity.

ANS: A, B, C
Hormones are secreted by endocrine glands and travel through the body to reach their target tissues. Hormone activity can increase or decrease according to the bodys needs, and continued hormone activity requires continued production and secretion. Control is maintained via negative feedback. Hormones are not stored for later use, and they do not alter genetic activity.

DIF: Understanding/Comprehension REF: 1234

KEY: Endocrine system| pathophysiology
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse cares for a client with a hypofunctioning anterior pituitary gland. Which hormones should the nurse expect to be affected by this condition? (Select all that apply.)
a. Thyroid-stimulating hormone
b. Vasopressin
c. Follicle-stimulating hormone
d. Calcitonin
e. Growth hormone

ANS: A, C, E
Thyroid-stimulating hormone, follicle-stimulating hormone, and growth hormone all are secreted by the anterior pituitary gland. Vasopressin is secreted from the posterior pituitary gland. Calcitonin is secreted from the thyroid gland.

DIF: Remembering/Knowledge REF: 1235
KEY: Endocrine system| pathophysiology
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse assesses clients who have endocrine disorders. Which assessment findings are paired correctly with the endocrine disorder? (Select all that apply.)
a. Excessive thyroid-stimulating hormone Increased bone formation
b. Excessive melanocyte-stimulating hormone Darkening of the skin
c. Excessive parathyroid hormone Synthesis and release of corticosteroids
d. Excessive antidiuretic hormone Increased urinary output
e. Excessive adrenocorticotropic hormone Increased bone resorption

ANS: A, B
Thyroid-stimulating hormone targets thyroid tissue and stimulates the formation of bone. Melanocyte-stimulating hormone stimulates melanocytes and promotes pigmentation or the darkening of the skin. Parathyroid hormone stimulates bone resorption. Antidiuretic hormone targets the kidney and promotes water reabsorption, causing a decrease in urinary output. Adrenocorticotropic hormone targets the adrenal cortex and stimulates the synthesis and release of corticosteroids.

DIF: Understanding/Comprehension REF: 1237
KEY: Endocrine system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 62: Care of Patients with Pituitary and Adrenal Gland Problems

MULTIPLE CHOICE

1. A nurse assesses clients for potential endocrine dysfunction. Which client is at greatest risk for a deficiency of gonadotropin and growth hormone?
a. A 36-year-old female who has used oral contraceptives for 5 years
b. A 42-year-old male who experienced head trauma 3 years ago
c. A 55-year-old female with a severe allergy to shellfish and iodine
d. A 64-year-old male with adult-onset diabetes mellitus

ANS: B
Gonadotropin and growth hormone are anterior pituitary hormones. Head trauma is a common cause of anterior pituitary hypofunction. The other factors do not increase the risk of this condition.

DIF: Applying/Application REF: 1246
KEY: Pituitary disorder| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse plans care for a client with a growth hormone deficiency. Which action should the nurse include in this clients plan of care?
a. Avoid intramuscular medications.
b. Place the client in protective isolation.
c. Use a lift sheet to re-position the client.
d. Assist the client to dangle before rising.

ANS: C
In adults, growth hormone is necessary to maintain bone density and strength. Adults with growth hormone deficiency have thin, fragile bones. Avoiding IM medications, using protective isolation, and assisting the client as he or she moves from sitting to standing will not serve as safety measures when the client is deficient in growth hormone.

DIF: Applying/Application REF: 1246
KEY: Pituitary disorder| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. A nurse cares for a male client with hypopituitarism who is prescribed testosterone hormone replacement therapy. The client asks, How long will I need to take this medication? How should the nurse respond?
a. When your blood levels of testosterone are normal, the therapy is no longer needed.
b. When your beard thickens and your voice deepens, the dose is decreased, but treatment will continue forever.
c. When your sperm count is high enough to demonstrate fertility, you will no longer need this therapy.
d. With age, testosterone levels naturally decrease, so the medication can be stopped when you are 50 years old.

ANS: B
Testosterone therapy is initiated with high-dose testosterone derivatives and is continued until virilization is achieved. The dose is then decreased, but therapy continues throughout life. Therapy will continue throughout life; therefore, it will not be discontinued when blood levels are normal, at the age of 50 years, or when sperm counts are high.

DIF: Applying/Application REF: 1247
KEY: Pituitary disorder| medications MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A nurse cares for a client after a pituitary gland stimulation test using insulin. The clients post-stimulation laboratory results indicate elevated levels of growth hormone (GH) and adrenocorticotropic hormone (ACTH).

How should the nurse interpret these results?
a. Pituitary hypofunction
b. Pituitary hyperfunction
c. Pituitary-induced diabetes mellitus
d. Normal pituitary response to insulin

ANS: D
Some tests for pituitary function involve administering agents that are known to stimulate the secretion of specific pituitary hormones and then measuring the response. Such tests are termed stimulation tests. The stimulation test for GH or ACTH assessment involves injecting the client with regular insulin (0.05 to 1 unit/kg of body weight) and checking circulating levels of GH and ACTH. The presence of insulin in clients with normal pituitary function causes increased release of GH and ACTH.

DIF: Applying/Application REF: 1254
KEY: Pituitary disorder| laboratory values
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. After teaching a client with acromegaly who is scheduled for a hypophysectomy, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. I will no longer need to limit my fluid intake after surgery.
b. I am glad no visible incision will result from this surgery.
c. I hope I can go back to wearing size 8 shoes instead of size 12.
d. I will wear slip-on shoes after surgery to limit bending over.

ANS: C
Although removal of the tissue that is oversecreting hormones can relieve many symptoms of hyperpituitarism, skeletal changes and organ enlargement are not reversible. It will be appropriate for the client to drink as needed postoperatively and avoid bending over. The client can be reassured that the incision will not be visible

DIF: Applying/Application REF: 1249
KEY: Pituitary disorder| preoperative nursing
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse assesses a client who is recovering from a transsphenoidal hypophysectomy. The nurse notes nuchal rigidity. Which action should the nurse take first?
a. Encourage range-of-motion exercises.
b. Document the finding and monitor the client.
c. Take vital signs, including temperature.
d. Assess pain and administer pain medication.

ANS: C
Nuchal rigidity is a major manifestation of meningitis, a potential postoperative complication associated with this surgery. Meningitis is an infection; usually the client will also have a fever and tachycardia. Range-of-motion exercises are inappropriate because meningitis is a possibility. Documentation should be done after all assessments are completed and should not be the only action. Although pain medication may be a palliative measure, it is not the most appropriate initial action.

DIF: Applying/Application REF: 1249
KEY: Pituitary disorder| postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. After teaching a client who is recovering from an endoscopic trans-nasal hypophysectomy, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?
a. I will wear dark glasses to prevent sun exposure.
b. Ill keep food on upper shelves so I do not have to bend over.

c. I must wash the incision with peroxide and redress it daily.
d. I shall cough and deep breathe every 2 hours while I am awake.

ANS: B
After this surgery, the client must take care to avoid activities that can increase intracranial pressure. The client should avoid bending from the waist and should not bear down, cough, or lie flat. With this approach, there is no incision to clean and dress. Protection from sun exposure is not necessary after this procedure.

DIF: Applying/Application REF: 1249
KEY: Pituitary disorder| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Health Promotion and Maintenance

8. A nurse cares for a client who possibly has syndrome of inappropriate antidiuretic hormone (SIADH). The clients serum sodium level is 114 mEq/L. Which action should the nurse take first?
a. Consult with the dietitian about increased dietary sodium.
b. Restrict the clients fluid intake to 600 mL/day.
c. Handle the client gently by using turn sheets for re-positioning.
d. Instruct unlicensed assistive personnel to measure intake and output.

ANS: B
With SIADH, clients often have dilutional hyponatremia. The client needs a fluid restriction, sometimes to as little as 500 to 600 mL/24 hr. Adding sodium to the clients diet will not help if he or she is retaining fluid and diluting the sodium. The client is not at increased risk for fracture, so gentle handling is not an issue. The client should be on intake and output; however, this will monitor only the clients intake, so it is not the best answer. Reducing intake will help increase the clients sodium.

DIF: Applying/Application REF: 1251
KEY: Pituitary disorder| electrolyte imbalance
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

9. A nurse plans care for a client with Cushings disease. Which action should the nurse include in this clients plan of care to prevent injury?
a. Pad the siderails of the clients bed.
b. Assist the client to change positions slowly.
c. Use a lift sheet to change the clients position.
d. Keep suctioning equipment at the clients bedside.

ANS: C
Cushings syndrome or disease greatly increases the serum levels of cortisol, which contributes to excessive bone demineralization and increases the risk for pathologic bone fracture. Padding the siderails and assisting the client to change position may be effective, but these measures will not protect him or her as much as using a lift sheet. The client should not require suctioning.

DIF: Applying/Application REF: 1257
KEY: Adrenal gland disorder| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A nurse is caring for a client who was prescribed high-dose corticosteroid therapy for 1 month to treat a severe inflammatory condition. The clients symptoms have now resolved and the client asks, When can I stop taking these medications? How should the nurse respond?
a. It is possible for the inflammation to recur if you stop the medication.
b. Once you start corticosteroids, you have to be weaned off them.
c. You must decrease the dose slowly so your hormones will work again.
d. The drug suppresses your immune system, which must be built back up.

ANS: B

One of the most common causes of adrenal insufficiency, a life-threatening problem, is the sudden cessation of long-term, high-dose corticosteroid therapy. This therapy suppresses the hypothalamic-pituitary-adrenal axis and must be withdrawn gradually to allow for pituitary production of adrenocorticotropic hormone and adrenal production of cortisol. Decreasing hormone therapy slowly ensures self-production of hormone, not hormone effectiveness. Building the clients immune system and rebound inflammation are not concerns related to stopping high-dose corticosteroids.

DIF: Applying/Application REF: 1260
KEY: Adrenal gland disorder| steroid| medication safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11. A nurse cares for a client with adrenal hyperfunction. The client screams at her husband, bursts into tears, and throws her water pitcher against the wall. She then tells the nurse, I feel like I am going crazy. How should the nurse respond?
a. I will ask your doctor to order a psychiatric consult for you.
b. You feel this way because of your hormone levels.
c. Can I bring you information about support groups?
d. I will close the door to your room and restrict visitors.

ANS: B
Hypercortisolism can cause the client to show neurotic or psychotic behavior. The client needs to know that these behavior changes do not reflect a true psychiatric disorder and will resolve when therapy results in lower and steadier blood cortisol levels. The client needs to understand this effect and does not need a psychiatrist, support groups, or restricted visitors at this time.

DIF: Applying/Application REF: 1257
KEY: Adrenal gland disorder| psychosocial response
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

12. A client with hyperaldosteronism is being treated with spironolactone (Aldactone) before surgery. Which precautions does the nurse teach this client?
a. Read the label before using salt substitutes.
b. Do not add salt to your food when you eat.
c. Avoid exposure to sunlight.
d. Take Tylenol instead of aspirin for pain.

ANS: A
Spironolactone is a potassium-sparing diuretic used to control potassium levels. Its use can lead to hyperkalemia. Although the goal is to increase the clients potassium, unknowingly adding potassium can cause complications. Some salt substitutes are composed of potassium chloride and should be avoided by clients on spironolactone therapy. Depending on the client, he or she may benefit from a low-sodium diet before surgery, but this may not be necessary. Avoiding sunlight and Tylenol is not necessary.

DIF: Applying/Application REF: 1261
KEY: Adrenal gland disorder| medication safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A nurse cares for a client with chronic hypercortisolism. Which action should the nurse take?
a. Wash hands when entering the room.
b. Keep the client in airborne isolation.
c. Observe the client for signs of infection.
d. Assess the clients daily chest x-ray.

ANS: A
Excess cortisol reduces the number of circulating lymphocytes, inhibits maturation of macrophages, reduces antibody synthesis, and inhibits production of cytokines and inflammatory chemicals. As a result, these clients

are at greater risk of infection and may not have the expected inflammatory manifestations when an infection is present. The nurse needs to take precautions to decrease the clients risk. It is not necessary to keep the client in isolation. The client does not need a daily chest x-ray.

DIF: Applying/Application REF: 1257
KEY: Adrenal gland disorder| infection control
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

14. A nurse cares for a client who is recovering from a hypophysectomy. Which action should the nurse take first?
a. Keep the head of the bed flat and the client supine.
b. Instruct the client to cough, turn, and deep breathe.
c. Report clear or light yellow drainage from the nose.
d. Apply petroleum jelly to lips to avoid dryness.

ANS: C
A light yellow drainage or a halo effect on the dressing is indicative of a cerebrospinal fluid leak. The client should have the head of the bed elevated after surgery. Although deep breathing is important postoperatively, coughing should be avoided to prevent cerebrospinal fluid leakage. Although application of petroleum jelly to the lips will help with dryness, this instruction is not as important as reporting the yellowish drainage.

DIF: Applying/Application REF: 1249
KEY: Pituitary disorder| postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

15. A nurse teaches a client with a cortisol deficiency who is prescribed prednisone (Deltasone). Which statement should the nurse include in this clients instructions?
a. You will need to learn how to rotate the injection sites.
b. If you work outside in the heat, you may need another drug.
c. You need to follow a diet with strict sodium restrictions.
d. Take one tablet in the morning and two tablets at night.

ANS: B
Steroid dosage adjustment may be needed if the client works outdoors and might be difficult, especially in hot weather, when the client is sweating a great deal more than normal. Clients take prednisone orally, have no need for a salt restriction, and usually start the regimen with two tablets in the morning and one at night.

DIF: Applying/Application REF: 1253
KEY: Adrenal gland disorder| steroid| medication safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. An emergency nurse cares for a client who is experiencing an acute adrenal crisis. Which action should the nurse take first?
a. Obtain intravenous access.
b. Administer hydrocortisone succinate (Solu-Cortef).
c. Assess blood glucose.
d. Administer insulin and dextrose.

ANS: A
All actions are appropriate for the client with adrenal crisis. However, therapy is given intravenously, so the priority is to establish IV access. Solu-Cortef is the drug of choice. Blood glucose is monitored hourly and treatment is provided as needed. Insulin and dextrose are used to treat any hyperkalemia.

DIF: Applying/Application REF: 1253
KEY: Adrenal gland disorder| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse assesses a client with anterior pituitary hyperfunction. Which clinical manifestations should the nurse expect? (Select all that apply.)
a. Protrusion of the lower jaw
b. High-pitched voice
c. Enlarged hands and feet
d. Kyphosis
e. Barrel-shaped chest
f. Excessive sweating

ANS: A, C, D, E, F
Anterior pituitary hyperfunction typically will cause protrusion of the lower jaw, deepening of the voice, enlarged hands and feet, kyphosis, barrel-shaped chest, and excessive sweating.

DIF: Remembering/Knowledge REF: 1248
KEY: Pituitary disorder| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse assesses clients with potential endocrine disorders. Which clients are at high risk for hypopituitarism? (Select all that apply.)
a. A 20-year-old female with benign pituitary tumors
b. A 32-year-old male with diplopia
c. A 41-year-old female with anorexia nervosa
d. A 55-year-old male with hypertension
e. A 60-year-old female who is experiencing shock
f. A 68-year-old male who has gained weight recently

ANS: A, C, D, E
Pituitary tumors, anorexia nervosa, hypertension, and shock are all conditions that can cause hypopituitarism. Diplopia is a manifestation of hypopituitarism, and weight gain is a manifestation of Cushings disease and syndrome of inappropriate antidiuretic hormone. They are not risk factors for hypopituitarism.

DIF: Remembering/Knowledge REF: 1246
KEY: Pituitary disorder| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nurse assesses a client who potentially has hyperaldosteronism. Which serum laboratory values should the nurse associate with this disorder? (Select all that apply.)
a. Sodium: 150 mEq/L
b. Sodium: 130 mEq/L
c. Potassium: 2.5 mEq/L
d. Potassium: 5.0 mEq/L
e. pH: 7.28
f. pH: 7.50

ANS: A, C, E
Aldosterone increases reabsorption of sodium and excretion of potassium. Hyperaldosteronism causes hypernatremia, hypokalemia, and metabolic alkalosis. Hyponatremia, hyperkalemia, and acidosis are manifestations of adrenal insufficiency.

DIF: Applying/Application REF: 1251
KEY: Adrenal gland disorder| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse teaches a client with Cushings disease. Which dietary requirements should the nurse include in this clients teaching? (Select all that apply.)
a. Low calcium
b. Low carbohydrate
c. Low protein
d. Low calories
e. Low sodium

ANS: B, D, E
The client with Cushings disease has weight gain, muscle loss, hyperglycemia, and sodium retention. Dietary modifications need to include reduction of carbohydrates and total calories to prevent or reduce the degree of hyperglycemia. Sodium retention causes water retention and hypertension. Clients are encouraged to restrict their sodium intake moderately. Clients often have bone density loss and need more calcium. Increased protein intake will help decrease muscle loss.

DIF: Applying/Application REF: 1258
KEY: Adrenal gland disorder| laboratory values
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

5. A nurse cares for a client who is prescribed vasopressin (DDAVP) for diabetes insipidus. Which assessment findings indicate a therapeutic response to this therapy? (Select all that apply.)
a. Urine output is increased.
b. Urine output is decreased.
c. Specific gravity is increased.
d. Specific gravity is decreased.
e. Urine osmolality is increased.
f. Urine osmolality is decreased.

ANS: A, D, F
Diabetes insipidus causes urine output to be greatly increased, with a low urine osmolality, as evidenced by a low specific gravity. Effective treatment results in decreased urine output that is more concentrated, as evidenced by an increased specific gravity.

DIF: Applying/Application REF: 1251
KEY: Pituitary disorder| laboratory values
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse assesses clients with potential endocrine disorders. Which clients are at high risk for adrenal insufficiency? (Select all that apply.)
a. A 22-year-old female with metastatic cancer
b. A 43-year-old male with tuberculosis
c. A 51-year-old female with asthma
d. A 65-year-old male with gram-negative sepsis
e. A 70-year-old female with hypertension

ANS: A, B, D
Metastatic cancer, tuberculosis, and gram-negative sepsis are primary causes of adrenal insufficiency. Active tuberculosis is a contributing factor for syndrome of inappropriate antidiuretic hormone. Hypertension is a key manifestation of Cushings disease. These are not risk factors for adrenal insufficiency.

DIF: Remembering/Knowledge REF: 1248
KEY: Adrenal gland disorder| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse assesses a client with Cushings disease. Which assessment findings should the nurse correlate with this disorder? (Select all that apply.)

a. Moon face
b. Weight loss
c. Hypotension
d. Petechiae
e. Muscle atrophy

ANS: A, D, E
Clinical manifestations of Cushings disease include moon face, weight gain, hypertension, petechiae, and muscle atrophy.

DIF: Remembering/Knowledge REF: 1257
KEY: Adrenal gland disorder| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

Chapter 63: Care of Patients with Problems of the Thyroid and Parathyroid Glands

MULTIPLE CHOICE

1. A nurse assesses a client with hyperthyroidism who is prescribed lithium carbonate. Which assessment finding should alert the nurse to a side effect of this therapy?
a. Blurred and double vision
b. Increased thirst and urination
c. Profuse nausea and diarrhea
d. Decreased attention and insomnia

ANS: B
Lithium antagonizes antidiuretic hormone and can cause symptoms of diabetes insipidus. This manifests with increased thirst and urination. Lithium has no effect on vision, gastric upset, or level of consciousness.

DIF: Applying/Application REF: 1265
KEY: Thyroid gland disorder| medication safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse assesses a client who is recovering from a total thyroidectomy and notes the development of stridor. Which action should the nurse take first?
a. Reassure the client that the voice change is temporary.
b. Document the finding and assess the client hourly.
c. Place the client in high-Fowlers position and apply oxygen.
d. Contact the provider and prepare for intubation.

ANS: D
Stridor on exhalation is a hallmark of respiratory distress, usually caused by obstruction resulting from edema. One emergency measure is to remove the surgical clips to relieve the pressure. This might be a physician function. The nurse should prepare to assist with emergency intubation or tracheostomy while notifying the provider or the Rapid Response Team. Stridor is an emergency situation; therefore, reassuring the client, documenting, and reassessing in an hour do not address the urgency of the situation. Oxygen should be applied, but this action will not keep the airway open.

DIF: Applying/Application REF: 1269
KEY: Thyroid gland disorder| postoperative nursing| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A nurse assesses a client who is recovering from a subtotal thyroidectomy. On the second postoperative day the client states, I feel numbness and tingling around my mouth. What action should the nurse take?
a. Offer mouth care.
b. Loosen the dressing.
c. Assess for Chvosteks sign.
d. Ask the client orientation questions.

ANS: C
Numbness and tingling around the mouth or in the fingers and toes are manifestations of hypocalcemia, which could progress to cause tetany and seizure activity. The nurse should assess the client further by testing for Chvosteks sign and Trousseaus sign. Then the nurse should notify the provider. Mouth care, loosening the dressing, and orientation questions do not provide important information to prevent complications of low calcium levels.

DIF: Applying/Application REF: 1276
KEY: Thyroid gland disorder| postoperative nursing| emergency nursing| electrolyte imbalance MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse assesses a client on the medical-surgical unit. Which statement made by the client should alert the nurse to the possibility of hypothyroidism?
a. My sister has thyroid problems.
b. I seem to feel the heat more than other people.
c. Food just doesnt taste good without a lot of salt.
d. I am always tired, even with 12 hours of sleep.

ANS: D
Clients with hypothyroidism usually feel tired or weak despite getting many hours of sleep. Thyroid problems are not inherited. Heat intolerance is indicative of hyperthyroidism. Loss of taste is not a manifestation of hypothyroidism.

DIF: Applying/Application REF: 1271
KEY: Thyroid gland disorder| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse cares for a client who presents with bradycardia secondary to hypothyroidism. Which medication should the nurse anticipate being prescribed to the client?
a. Atropine sulfate
b. Levothyroxine sodium (Synthroid)
c. Propranolol (Inderal)
d. Epinephrine (Adrenalin)

ANS: B
The treatment for bradycardia from hypothyroidism is to treat the hypothyroidism using levothyroxine sodium. If the heart rate were so slow that it became an emergency, then atropine or epinephrine might be an option for short-term management. Propranolol is a beta blocker and would be contraindicated for a client with bradycardia.

DIF: Applying/Application REF: 1272
KEY: Thyroid gland disorder| medications
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse plans care for a client with hypothyroidism. Which priority problem should the nurse plan to address first for this client?
a. Heat intolerance
b. Body image problems
c. Depression and withdrawal
d. Obesity and water retention

ANS: C
Hypothyroidism causes many problems in psychosocial functioning. Depression is the most common reason for seeking medical attention. Memory and attention span may be impaired. The clients family may have great difficulty accepting and dealing with these changes. The client is often unmotivated to participate in self-care. Lapses in memory and attention require the nurse to ensure that the clients environment is safe. Heat intolerance is seen in hyperthyroidism. Body image problems and weight issues do not take priority over mental status and safety.

DIF: Applying/Application REF: 1272
KEY: Thyroid gland disorder| psychosocial response
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Psychological Integrity

7. A nurse assesses a client who is prescribed levothyroxine (Synthroid) for hypothyroidism. Which assessment finding should alert the nurse that the medication therapy is effective?

a. Thirst is recognized and fluid intake is appropriate.
b. Weight has been the same for 3 weeks.
c. Total white blood cell count is 6000 cells/mm3.
d. Heart rate is 70 beats/min and regular.

ANS: D
Hypothyroidism decreases body functioning and can result in effects such as bradycardia, confusion, and constipation. If a clients heart rate is bradycardic while on thyroid hormone replacement, this is an indicator that the replacement may not be adequate. Conversely, a heart rate above 100 beats/min may indicate that the client is receiving too much of the thyroid hormone. Thirst, fluid intake, weight, and white blood cell count do not represent a therapeutic response to this medication.

DIF: Applying/Application REF: 1272
KEY: Thyroid gland disorder| medications
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A nurse cares for a client who has hypothyroidism as a result of Hashimotos thyroiditis. The client asks, How long will I need to take this thyroid medication? How should the nurse respond?
a. You will need to take the thyroid medication until the goiter is completely gone.
b. Thyroiditis is cured with antibiotics. Then you wont need thyroid medication.
c. Youll need thyroid pills for life because your thyroid wont start working again.
d. When blood tests indicate normal thyroid function, you can stop the medication.

ANS: C
Hashimotos thyroiditis results in a permanent loss of thyroid function. The client will need lifelong thyroid replacement therapy. The client will not be able to stop taking the medication.

DIF: Applying/Application REF: 1274
KEY: Thyroid gland disorder| medications
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Health Promotion and Maintenance

9. A nurse assesses clients for potential endocrine disorders. Which client is at greatest risk for hyperparathyroidism?
a. A 29-year-old female with pregnancy-induced hypertension
b. A 41-year-old male receiving dialysis for end-stage kidney disease
c. A 66-year-old female with moderate heart failure
d. A 72-year-old male who is prescribed home oxygen therapy

ANS: B
Clients who have chronic kidney disease do not completely activate vitamin D and poorly absorb calcium from the GI tract. They are chronically hypocalcemic, and this triggers overstimulation of the parathyroid glands. Pregnancy-induced hypertension, moderate heart failure, and home oxygen therapy do not place a client at higher risk for hyperparathyroidism.

DIF: Applying/Application REF: 1275
KEY: Parathyroid gland disorder| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. A nurse plans care for a client with hyperparathyroidism. Which intervention should the nurse include in this clients plan of care?
a. Ask the client to ambulate in the hallway twice a day.
b. Use a lift sheet to assist the client with position changes.
c. Provide the client with a soft-bristled toothbrush for oral care.
d. Instruct the unlicensed assistive personnel to strain the clients urine for stones.

ANS: B

Hyperparathyroidism causes increased resorption of calcium from the bones, increasing the risk for pathologic fractures. Using a lift sheet when moving or positioning the client, instead of pulling on the client, reduces the risk of bone injury. Hyperparathyroidism can cause kidney stones, but not every client will need to have urine strained. The priority is preventing injury. Ambulating in the hall and using a soft toothbrush are not specific interventions for this client.

DIF: Applying/Application REF: 1275
KEY: Parathyroid gland disorder| safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A nurse cares for a client who is recovering from a parathyroidectomy. When taking the clients blood pressure, the nurse notes that the clients hand has gone into flexion contractions. Which laboratory result does the nurse correlate with this condition?
a. Serum potassium: 2.9 mEq/L
b. Serum magnesium: 1.7 mEq/L
c. Serum sodium: 122 mEq/L
d. Serum calcium: 6.9 mg/dL

ANS: D
Hypocalcemia destabilizes excitable membranes and can lead to muscle twitches, spasms, and tetany. This effect of hypocalcemia is enhanced in the presence of tissue hypoxia. The flexion contractions (Trousseaus sign) that occur during blood pressure measurement are indicative of hypocalcemia, not the other electrolyte imbalances, which include hypokalemia, hyponatremia, and hypomagnesemia.

DIF: Applying/Application REF: 1276
KEY: Parathyroid gland disorder| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12. A nurse cares for a client newly diagnosed with Graves disease. The clients mother asks, I have diabetes mellitus. Am I responsible for my daughters disease? How should the nurse respond?
a. The fact that you have diabetes did not cause your daughter to have Graves disease. No connection is known between Graves disease and diabetes.
b. An association has been noted between Graves disease and diabetes, but the fact that you have diabetes did not cause your daughter to have Graves disease.
c. Graves disease is associated with autoimmune diseases such as rheumatoid arthritis, but not with a disease such as diabetes mellitus.
d. Unfortunately, Graves disease is associated with diabetes, and your diabetes could have led to your daughter having Graves disease.

ANS: B
An association between autoimmune diseases such as rheumatoid arthritis and diabetes mellitus has been noted. The predisposition is probably polygenic, and the mothers diabetes did not cause her daughters Graves disease. The other statements are inaccurate.

DIF: Understanding/Comprehension REF: 1265
KEY: Thyroid gland disorder| genetics MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. While assessing a client with Graves disease, the nurse notes that the clients temperature has risen 1 F. Which action should the nurse take first?
a. Turn the lights down and shut the clients door.
b. Call for an immediate electrocardiogram (ECG).
c. Calculate the clients apical-radial pulse deficit.
d. Administer a dose of acetaminophen (Tylenol).

ANS: A
A temperature increase of 1 F may indicate the development of thyroid storm, and the provider needs to be

notified. But before notifying the provider, the nurse should take measures to reduce environmental stimuli that increase the risk of cardiac complications. The nurse can then call for an ECG. The apical-radial pulse deficit would not be necessary, and Tylenol is not needed because the temperature increase is due to thyroid activity.

DIF: Applying/Application REF: 1267
KEY: Thyroid gland disorder| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. After teaching a client who is recovering from a complete thyroidectomy, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional instruction?
a. I may need calcium replacement after surgery.
b. After surgery, I wont need to take thyroid medication.
c. Ill need to take thyroid hormones for the rest of my life.
d. I can receive pain medication if I feel that I need it.

ANS: B
After the client undergoes a thyroidectomy, the client must be given thyroid replacement medication for life. He or she may also need calcium if the parathyroid is damaged during surgery, and can receive pain medication postoperatively.

DIF: Applying/Application REF: 1269
KEY: Thyroid gland disorder| postoperative nursing| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

15. A nurse plans care for a client who has hypothyroidism and is admitted for pneumonia. Which priority intervention should the nurse include in this clients plan of care?
a. Monitor the clients intravenous site every shift.
b. Administer acetaminophen (Tylenol) for fever.
c. Ensure that working suction equipment is in the room.
d. Assess the clients vital signs every 4 hours.

ANS: C
A client with hypothyroidism who develops another illness is at risk for myxedema coma. In this emergency situation, maintaining an airway is a priority. The nurse should ensure that suction equipment is available in the clients room because it may be needed if myxedema coma develops. The other interventions are necessary for any client with pneumonia, but having suction available is a safety feature for this client.

DIF: Applying/Application REF: 1269
KEY: Thyroid gland disorder| safety| pulmonary infection
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse evaluates the following laboratory results for a client who has hypoparathyroidism:
Calcium 7.2 mg/dL
Sodium 144 mEq/L
Magnesium 1.2 mEq/L
Potassium 5.7 mEq/L
Based on these results, which medications should the nurse anticipate administering? (Select all that apply.)
a. Oral potassium chloride
b. Intravenous calcium chloride
c. 3% normal saline IV solution
d. 50% magnesium sulfate
e. Oral calcitriol (Rocaltrol)

ANS: B, D

The client has hypocalcemia (treated with calcium chloride) and hypomagnesemia (treated with magnesium sulfate). The potassium level is high, so replacement is not needed. The clients sodium level is normal, so hypertonic IV solution is not needed. No information about a vitamin D deficiency is evident, so calcitriol is not needed.

DIF: Applying/Application REF: 1275
KEY: Parathyroid gland disorder| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A nurse cares for a client with elevated triiodothyronine and thyroxine, and normal thyroid-stimulating hormone levels. Which actions should the nurse take? (Select all that apply.)
a. Administer levothyroxine (Synthroid).
b. Administer propranolol (Inderal).
c. Monitor the apical pulse.
d. Assess for Trousseaus sign.
e. Initiate telemetry monitoring.

ANS: C, E
The clients laboratory findings suggest that the client is experiencing hyperthyroidism. The increased metabolic rate can cause an increase in the clients heart rate, and the client should be monitored for the development of dysrhythmias. Placing the client on a telemetry monitor might also be a precaution. Levothyroxine is given for hypothyroidism. Propranolol is a beta blocker often used to lower sympathetic nervous system activity in hyperthyroidism. Trousseaus sign is a test for hypocalcemia.

DIF: Applying/Application REF: 1266
KEY: Thyroid gland disorder| laboratory values
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse teaches a client with hyperthyroidism. Which dietary modifications should the nurse include in this clients teaching? (Select all that apply.)
a. Increased carbohydrates
b. Decreased fats
c. Increased calorie intake
d. Supplemental vitamins
e. Increased proteins

ANS: A, C, E
The client is hypermetabolic and has an increased need for carbohydrates, calories, and proteins. Proteins are especially important because the client is at risk for a negative nitrogen balance. There is no need to decrease fat intake or take supplemental vitamins.

DIF: Applying/Application REF: 1268
KEY: Thyroid gland disorder| nutritional requirements
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A nurse assesses a client with hypothyroidism who is admitted with acute appendicitis. The nurse notes that the clients level of consciousness has decreased. Which actions should the nurse take? (Select all that apply.)
a. Infuse intravenous fluids.
b. Cover the client with warm blankets.
c. Monitor blood pressure every 4 hours.
d. Maintain a patent airway.
e. Administer oral glucose as prescribed.

ANS: A, B, D
A client with hypothyroidism and an acute illness is at risk for myxedema coma. A decrease in level of consciousness is a symptom of myxedema. The nurse should infuse IV fluids, cover the client with warm

blankets, monitor blood pressure every hour, maintain a patent airway, and administer glucose intravenously as prescribed.

DIF: Applying/Application REF: 1270
KEY: Thyroid gland disorder| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. A nurse teaches a client who is prescribed an unsealed radioactive isotope. Which statements should the nurse include in this clients education? (Select all that apply.)
a. Do not share utensils, plates, and cups with anyone else.
b. You can play with your grandchildren for 1 hour each day.
c. Eat foods high in vitamins such as apples, pears, and oranges.
d. Wash your clothing separate from others in the household.
e. Take a laxative 2 days after therapy to excrete the radiation.

ANS: A, D, E
A client who is prescribed an unsealed radioactive isotope should be taught to not share utensils, plates, and cups with anyone else; to avoid contact with pregnant women and children; to avoid eating foods with cores or bones, which will leave contaminated remnants; to wash clothing separate from others in the household and run an empty cycle before washing other peoples clothing; and to take a laxative on days 2 and 3 after receiving treatment to help excrete the contaminated stool faster.

DIF: Applying/Application REF: 1269
KEY: Thyroid gland disorder| safety| cancer| radiation therapy
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 64: Care of Patients with Diabetes Mellitus

MULTIPLE CHOICE

1.A nurse is teaching a client with diabetes mellitus who asks, Why is it necessary to maintain my blood glucose levels no lower than about 60 mg/dL? How should the nurse respond?

a. Glucose is the only fuel used by the body to produce the energy that it needs.
b. Your brain needs a constant supply of glucose because it cannot store it.
c. Without a minimum level of glucose, your body does not make red blood cells.
d. Glucose in the blood prevents the formation of lactic acid and prevents acidosis.

ANS: B

Because the brain cannot synthesize or store significant amounts of glucose, a continuous supply from the bodys circulation is needed to meet the fuel demands of the central nervous system. The nurse would want to educate the client to prevent hypoglycemia. The body can use other sources of fuel, including fat and protein, and glucose is not involved in the production of red blood cells. Glucose in the blood will encourage glucose metabolism but is not directly responsible for lactic acid formation.

DIF:Remembering/Knowledge REF: 1281

KEY: Diabetes mellitus| hypoglycemia MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2.A nurse reviews laboratory results for a client with diabetes mellitus who presents with polyuria, lethargy, and a blood glucose of 560 mg/dL. Which laboratory result should the nurse correlate with the clients polyuria?

a. Serum sodium: 163 mEq/L
b. Serum creatinine: 1.6 mg/dL
c. Presence of urine ketone bodies
d. Serum osmolarity: 375 mOsm/kg

ANS: D

Hyperglycemia causes hyperosmolarity of extracellular fluid. This leads to polyuria from an osmotic diuresis. The clients serum osmolarity is high. The clients sodium would be expected to be high owing to dehydration. Serum creatinine and urine ketone bodies are not related to the polyuria.

DIF:Applying/Application REF: 1282

KEYiabetes mellitus| hyperglycemia

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3.After teaching a young adult client who is newly diagnosed with type 1 diabetes mellitus, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the need for eye examinations?

a. At my age, I should continue seeing the ophthalmologist as I usually do.
b. I will see the eye doctor when I have a vision problem and yearly after age

40.

c. My vision will change quickly. I should see the ophthalmologist twice a year.
d. Diabetes can cause blindness, so I should see the ophthalmologist yearly.

ANS: D

Diabetic retinopathy is a leading cause of blindness in North America. All clients with diabetes, regardless of age, should be examined by an ophthalmologist (rather than an optometrist or optician) at diagnosis and at least yearly thereafter.

DIF:Applying/Application REF: 1283

KEY: Diabetes mellitus| health screening MSC: Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion

4.A nurse assesses a client who has a 15-year history of diabetes and notes decreased tactile sensation in both feet. Which action should the nurse take first?

a. Document the finding in the clients chart.
b. Assess tactile sensation in the clients hands.
c. Examine the clients feet for signs of injury.
d. Notify the health care provider.

ANS: C

Diabetic neuropathy is common when the disease is of long duration. The client is at great risk for injury in any area with decreased sensation because he or she is less able to feel injurious events. Feet are common locations for neuropathy and injury, so the nurse should inspect them for any signs of injury. After assessment, the nurse should document findings in the clients chart. Testing sensory perception in the hands may or may not be needed. The health care provider can be notified after assessment and documentation have been completed.

DIF:Applying/Application REF: 1301

KEYiabetes mellitus| neuropathy

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5.A nurse cares for a client who has a family history of diabetes mellitus. The client states, My father has type 1 diabetes mellitus. Will I develop this disease as well? How should the nurse respond?

a. Your risk of diabetes is higher than the general population, but it may not occur.
b. No genetic risk is associated with the development of type 1 diabetes mellitus.
c. The risk for becoming a diabetic is 50% because of how it is inherited.
d. Female children do not inherit diabetes mellitus, but male children will.

ANS: A

Risk for type 1 diabetes is determined by inheritance of genes coding for HLA-DR and HLA-DQ tissue types. Clients who have one parent with type 1 diabetes are at increased risk for its development. Diabetes (type 1) seems to require interaction between inherited risk and environmental factors, so not everyone with these genes develops diabetes. The other statements are not accurate.

DIF:Understanding/Comprehension REF: 1287

KEY: Diabetes mellitus| genetics MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6.A nurse teaches a client who is diagnosed with diabetes mellitus. Which statement should the nurse include in this clients plan of care to delay the onset of microvascular and macrovascular complications?

a. Maintain tight glycemic control and prevent hyperglycemia.
b. Restrict your fluid intake to no more than 2 liters a day.
c. Prevent hypoglycemia by eating a bedtime snack.
d. Limit your intake of protein to prevent ketoacidosis.

ANS: A

Hyperglycemia is a critical factor in the pathogenesis of long-term diabetic complications. Maintaining tight glycemic control will help delay the onset of complications. Restricting fluid intake is not part of the treatment plan for clients with diabetes. Preventing hypoglycemia and ketosis, although important, are not as important as maintaining daily glycemic control.

DIF:Applying/Application REF: 1281

KEY: Diabetes mellitus| hyperglycemia MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7.A nurse assesses clients who are at risk for diabetes mellitus. Which client is at greatest risk?

a. A 29-year-old Caucasian
b. A 32-year-old African-American
c. A 44-year-old Asian
d. A 48-year-old American Indian

ANS: D

Diabetes is a particular problem among African Americans, Hispanics, and American Indians. The incidence of diabetes increases in all races and ethnic groups with age. Being both an American Indian and middle-aged places this client at highest risk.

DIF:Understanding/Comprehension REF: 1287

KEYiabetes mellitus| health screening

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8.A nurse teaches a client about self-monitoring of blood glucose levels. Which statement should the nurse include in this clients teaching to prevent bloodborne infections?

a. Wash your hands after completing each test.
b. Do not share your monitoring equipment.
c. Blot excess blood from the strip with a cotton ball.

d. Use gloves when monitoring your blood glucose.

ANS: B

Small particles of blood can adhere to the monitoring device, and infection can be transported from one user to another. Hepatitis B in particular can survive in a dried state for about a week. The client should be taught to avoid sharing any equipment, including the lancet holder. The client should be taught to wash his or her hands before testing. The client would not need to blot excess blood away from the strip or wear gloves.

DIF:Applying/Application REF: 1298

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9.A nurse teaches a client with type 2 diabetes mellitus who is prescribed glipizide (Glucotrol). Which statement should the nurse include in this clients teaching?

a. Change positions slowly when you get out of bed.
b. Avoid taking nonsteroidal anti-inflammatory drugs (NSAIDs).
c. If you miss a dose of this drug, you can double the next dose.
d. Discontinue the medication if you develop a urinary infection.

ANS: B

NSAIDs potentiate the hypoglycemic effects of sulfonylurea agents. Glipizide is a sulfonylurea. The other statements are not applicable to glipizide.

DIF:Applying/Application REF: 1290

KEYiabetes mellitus| oral antidiabetic agents| medication safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

10.After teaching a client with type 2 diabetes mellitus who is prescribed nateglinide (Starlix), the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the prescribed therapy?

a. Ill take this medicine during each of my meals.
b. I must take this medicine in the morning when I wake.
c. I will take this medicine before I go to bed.
d. I will take this medicine immediately before I eat.

ANS: D

Nateglinide is an insulin secretagogue that is designed to increase meal-related insulin secretion. It should be taken immediately before each meal. The medication should not be taken without eating as it will decrease the clients blood glucose levels. The medication should be taken before meals instead of during meals.

DIF:Applying/Application REF: 1292

KEYiabetes mellitus| oral antidiabetic agents| medication safety

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

11.A nurse cares for a client who is prescribed pioglitazone (Actos). After 6 months of therapy, the client reports that his urine has become darker since starting the medication. Which action should the nurse take?

a. Assess for pain or burning with urination.
b. Review the clients liver function study results.
c. Instruct the client to increase water intake.
d. Test a sample of urine for occult blood.

ANS: B

Thiazolidinediones (including pioglitazone) can affect liver function; liver function should be assessed at the start of therapy and at regular intervals while the client continues to take these drugs. Dark urine is one indicator of liver impairment because bilirubin is increased in the blood and is excreted in the urine. The nurse should check the clients most recent liver function studies. The nurse does not need to assess for pain or burning with urination and does not need to check the urine for occult blood. The client does not need to be told to increase water intake.

DIF:Applying/Application REF: 1292

KEYiabetes mellitus| oral antidiabetic agents| medication safety

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12.A nurse cares for a client with diabetes mellitus who asks, Why do I need to administer more than one injection of insulin each day? How should the nurse respond?

a. You need to start with multiple injections until you become more proficient at self-injection.
b. A single dose of insulin each day would not match your blood insulin levels and your food intake patterns.
c. A regimen of a single dose of insulin injected each day would require that you eat fewer carbohydrates.
d. A single dose of insulin would be too large to be absorbed, predictably putting you at risk for insulin shock.

ANS: B

Even when a single injection of insulin contains a combined dose of different-acting insulin types, the timing of the actions and the timing of food intake may not match well enough to prevent wide variations in blood glucose levels. One dose of insulin would not be appropriate even if the client decreased carbohydrate intake. Additional injections are not required to allow the client practice with injections, nor will one dose increase the clients risk of insulin shock.

DIF:Applying/Application REF: 1294

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13.After teaching a client with diabetes mellitus to inject insulin, the nurse assesses the clients understanding.

Which statement made by the client indicates a need for additional teaching?

a. The lower abdomen is the best location because it is closest to the pancreas.
b. I can reach my thigh the best, so I will use the different areas of my thighs.
c. By rotating the sites in one area, my chance of having a reaction is decreased.
d. Changing injection sites from the thigh to the arm will change absorption rates.

ANS: A

The abdominal site has the fastest rate of absorption because of blood vessels in the area, not because of its proximity to the pancreas. The other statements are accurate assessments of insulin administration.

DIF:Applying/Application REF: 1294

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14.A nurse assesses a client with diabetes mellitus and notes the client only responds to a sternal rub by moaning, has capillary blood glucose of 33 g/dL, and has an intravenous line that is infiltrated with 0.45% normal saline. Which action should the nurse take first?

a. Administer 1 mg of intramuscular glucagon.
b. Encourage the client to drink orange juice.
c. Insert a new intravenous access line.
d. Administer 25 mL dextrose 50% (D50) IV push.

ANS: A

The clients blood glucose level is dangerously low. The nurse needs to administer glucagon IM immediately to increase the clients blood glucose level. The nurse should insert a new IV after administering the glucagon and can use the new IV site for future doses of D50 if the clients blood glucose level does not rise. Once the client is awake, orange juice may be administered orally along with a form of protein such as a peanut butter.

DIF:Applying/Application REF: 1301

KEYiabetes mellitus| hypoglycemia

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15.A nurse cares for a client with diabetes mellitus who is visually impaired. The client asks, Can I ask my niece to prefill my syringes and then store them for later use when I need them? How should the nurse respond?

a. Yes. Prefilled syringes can be stored for 3 weeks in the refrigerator in a vertical position with the needle pointing up.
b. Yes. Syringes can be filled with insulin and stored for a month in a location that is protected from light.
c. Insulin reacts with plastic, so prefilled syringes are okay, but you will need to use glass syringes.
d. No. Insulin syringes cannot be prefilled and stored for any length of time outside of the container.

ANS: A

Insulin is relatively stable when stored in a cool, dry place away from light. When refrigerated, prefilled plastic syringes are stable for up to 3 weeks. They should be stored in the refrigerator in the vertical position with the needle pointing up to prevent suspended insulin particles from clogging the needle.

DIF:Remembering/Knowledge REF: 1296

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16.A nurse teaches a client who is prescribed an insulin pump. Which statement should the nurse include in this clients discharge education?

a. Test your urine daily for ketones.
b. Use only buffered insulin in your pump.
c. Store the insulin in the freezer until you need it.
d. Change the needle every 3 days.

ANS: D

Having the same needle remain in place through the skin for longer than 3 days drastically increases the risk for infection in or through the delivery system. Having an insulin pump does not require the client to test for ketones in the urine. Insulin should not be frozen. Insulin is not buffered.

DIF:Applying/Application REF: 1295

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

17.After teaching a client who has diabetes mellitus and proliferative retinopathy, nephropathy, and peripheral neuropathy, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?

a. I have so many complications; exercising is not recommended.
b. I will exercise more frequently because I have so many complications.
c. I used to run for exercise; I will start training for a marathon.
d. I should look into swimming or water aerobics to get my exercise.

ANS: D

Exercise is not contraindicated for this client, although modifications based on existing pathology are necessary to prevent further injury. Swimming or water aerobics will give the client exercise without the worry of having the correct shoes or developing a foot injury. The client should not exercise too vigorously.

DIF:Applying/Application REF: 1298

KEY: Diabetes mellitus| exercise MSC: Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

18.An emergency department nurse assesses a client with ketoacidosis. Which clinical manifestation should the nurse correlate with this condition?

a. Increased rate and depth of respiration
b. Extremity tremors followed by seizure activity
c. Oral temperature of 102 F (38.9 C)
d. Severe orthostatic hypotension

ANS: A

Ketoacidosis decreases the pH of the blood, stimulating the respiratory control areas of the brain to buffer the effects of increasing acidosis. The rate and depth of respiration are increased (Kussmaul respirations) in an attempt to excrete more acids by exhalation. Tremors, elevated temperature, and orthostatic hypotension are not associated with ketoacidosis.

DIF:Applying/Application REF: 1313

KEYiabetes mellitus| hyperglycemia

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

19.A nurse assesses a client who has diabetes mellitus. Which arterial blood gas values should the nurse identify as potential ketoacidosis in this client?

a. pH 7.38, HCO_3 22 mEq/L, PCO_2 38 mm Hg, PO_2 98 mm Hg
b. pH 7.28, HCO_3 18 mEq/L, PCO_2 28 mm Hg, PO_2 98 mm Hg
c. pH 7.48, HCO_3 28 mEq/L, PCO_2 38 mm Hg, PO_2 98 mm Hg
d. pH 7.32, HCO_3 22 mEq/L, PCO_2 58 mm Hg, PO_2 88 mm Hg

ANS: B

When the lungs can no longer offset acidosis, the pH decreases to below normal. A client who has diabetic ketoacidosis would present with arterial blood gas values that show primary metabolic acidosis with decreased bicarbonate levels and a compensatory respiratory alkalosis with decreased carbon dioxide levels.

DIF:Applying/Application REF: 1313

KEYiabetes mellitus| hyperglycemia

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

20.A nurse cares for a client experiencing diabetic ketoacidosis who presents with Kussmaul respirations. Which action should the nurse take?

a. Administration of oxygen via face mask
b. Intravenous administration of 10% glucose
c. Implementation of seizure precautions
d. Administration of intravenous insulin

ANS: D

The rapid, deep respiratory efforts of Kussmaul respirations are the bodys attempt to reduce the acids produced by using fat rather than glucose for fuel. Only the administration of insulin will reduce this type of respiration by assisting glucose to move into cells and to be used for fuel instead of fat. The client who is in ketoacidosis may not experience any respiratory impairment and therefore does not need additional oxygen. Giving the client glucose would be contraindicated. The client does not require seizure precautions.

DIF:Applying/Application REF: 1313

KEYiabetes mellitus| hyperglycemia| respiratory distress/failure

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

21.A nurse cares for a client who has type 1 diabetes mellitus. The client asks, Is it okay for me to have an occasional glass of wine? How should the nurse respond?

a. Drinking any wine or alcohol will increase your insulin requirements.
b. Because of poor kidney function, people with diabetes should avoid alcohol.
c. You should not drink alcohol because it will make you hungry and overeat.
d. One glass of wine is okay with a meal and is counted as two fat exchanges.

ANS: D

Under normal circumstances, blood glucose levels will not be affected by moderate use of alcohol when diabetes is well controlled. Because alcohol can induce hypoglycemia, it should be ingested with or shortly after a meal. One alcoholic beverage is substituted for two fat exchanges when caloric intake is calculated. Kidney function is not impacted by alcohol intake. Alcohol is not associated with increased hunger or overeating.

DIF:Applying/Application REF: 1300

KEYiabetes mellitus| nutritional requirements

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

22.A nurse teaches a client with type 1 diabetes mellitus. Which statement should the nurse include in this clients teaching to decrease the clients insulin needs?

a. Limit your fluid intake to 2 liters a day.
b. Animal organ meat is high in insulin.
c. Limit your carbohydrate intake to 80 grams a day.
d. Walk at a moderate pace for 1 mile daily.

ANS: D

Moderate exercise such as walking helps regulate blood glucose levels on a daily basis and results in lowered insulin requirements for clients with type 1 diabetes mellitus. Restricting fluids and eating organ meats will not reduce insulin needs. People with diabetes need at least 130 grams of carbohydrates each day.

DIF:Applying/Application REF: 1318

KEY: Diabetes mellitus| exercise MSC: Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

23.A nurse cares for a client who is diagnosed with acute rejection 2 months after receiving a simultaneous pancreas-kidney transplant. The client states, I was doing so well with my new organs, and the thought of having to go back to living on hemodialysis and taking insulin is so depressing. How should the nurse respond?

a. Following the drug regimen more closely would have prevented this.
b. One acute rejection episode does not mean that you will lose the new organs.
c. Dialysis is a viable treatment option for you and may save your life.
d. Since you are on the national registry, you can receive a second transplantation.

ANS: B

An episode of acute rejection does not automatically mean that the client will lose the transplant. Pharmacologic manipulation of host immune responses at this time can limit damage to the organ and allow the graft to be maintained. The other statements either belittle the client or downplay his or her concerns. The client may not be a candidate for additional organ transplantation.

DIF:Applying/Application REF: 1304

KEYiabetes mellitus| pancreas-kidney transplant

MSC:Integrated Process: Caring

NOT: Client Needs Category: Psychosocial Integrity

24.After teaching a client who is recovering from pancreas transplantation, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional education?

a. If I develop an infection, I should stop taking my corticosteroid.
b. If I have pain over the transplant site, I will call the surgeon immediately.
c. I should avoid people who are ill or who have an infection.
d. I should take my cyclosporine exactly the way I was taught.

ANS: A

Immunosuppressive agents should not be stopped without the consultation of the transplantation physician, even if an infection is present. Stopping immunosuppressive therapy endangers the transplanted organ. The other statements are correct. Pain over the graft site may indicate rejection. Anti-rejection drugs cause immunosuppression, and the client should avoid crowds and people who are ill. Changing the routine of anti-rejection medications may cause them to not work optimally.

DIF:Applying/Application REF: 1303

KEYiabetes mellitus| pancreas-kidney transplant

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

25.A nurse assesses a client with diabetes mellitus 3 hours after a surgical procedure and notes the clients breath has a fruity odor. Which action should the nurse take?

a. Encourage the client to use an incentive spirometer.
b. Increase the clients intravenous fluid flow rate.
c. Consult the provider to test for ketoacidosis.
d. Perform meticulous pulmonary hygiene care.

ANS: C

The stress of surgery increases the action of counterregulatory hormones and suppresses the action of insulin, predisposing the client to ketoacidosis and metabolic acidosis. One manifestation of ketoacidosis is a fruity odor to the breath. Documentation should occur after all assessments have been completed. Using an incentive spirometer, increasing IV fluids, and performing pulmonary hygiene will not address this clients problem.

DIF:Applying/Application REF: 1310

KEYiabetes mellitus| hyperglycemia| postoperative nursing

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

26.A preoperative nurse assesses a client who has type 1 diabetes mellitus prior to a surgical procedure. The clients blood glucose level is 160 mg/dL. Which action should the nurse take?

a. Document the finding in the clients chart.
b. Administer a bolus of regular insulin IV.
c. Call the surgeon to cancel the procedure.
d. Draw blood gases to assess the metabolic state.

ANS: A

Clients who have type 1 diabetes and are having surgery have been found to have fewer complications, lower rates of infection, and better wound healing if blood glucose levels are maintained at between 140 and 180 mg/dL throughout the perioperative period. The nurse should document the finding and proceed with other operative care. The need for a bolus of insulin, canceling the procedure, or drawing arterial blood gases is not required.

DIF:Applying/Application REF: 1302

KEYiabetes mellitus| preoperative nursing

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

27.A nurse teaches a client with diabetes mellitus who is experiencing numbness and reduced sensation. Which statement should the nurse include in this clients teaching to prevent injury?

a. Examine your feet using a mirror every day.
b. Rotate your insulin injection sites every week.
c. Check your blood glucose level before each meal.
d. Use a bath thermometer to test the water temperature.

ANS: D

Clients with diminished sensory perception can easily experience a burn injury when bathwater is too hot. Instead of checking the temperature of the water by feeling it, they should use a thermometer. Examining the feet daily does not prevent injury, although daily foot examinations are important to find problems so they can be addressed. Rotating insulin and checking blood glucose levels will not prevent injury.

DIF:Applying/Application REF: 1307

KEY: Diabetes mellitus| foot care MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

28.A nurse reviews the medication list of a client with a 20-year history of diabetes mellitus. The client holds up the bottle of prescribed duloxetine (Cymbalta) and states, My cousin has depression and is taking this drug. Do you think Im depressed? How should the nurse respond?

a. Many people with long-term diabetes become depressed after a while.
b. Its for peripheral neuropathy. Do you have burning pain in your feet or hands?
c. This antidepressant also has anti-inflammatory properties for diabetic pain.
d. No. Many medications can be used for several different disorders.

ANS: B

Damage along nerves causes peripheral neuropathy and leads to burning pain along the nerves. Many drugs, including duloxetine (Cymbalta), can be used to treat peripheral neuropathy. The nurse should assess the client for this condition and then should provide an explanation of why this drug is being used. This medication, although it is used for depression, is not being used for that reason in this case. Duloxetine does not have anti-inflammatory properties. Telling the client that many medications are used for different disorders does not provide the client with enough information to be useful.

DIF:Applying/Application REF: 1308

KEY: Diabetes mellitus| neuropathy MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

29.A nurse assesses a client with diabetes mellitus. Which clinical manifestation should alert the nurse to decreased kidney function in this client?

a. Urine specific gravity of 1.033
b. Presence of protein in the urine
c. Elevated capillary blood glucose level
d. Presence of ketone bodies in the urine

ANS: B

Renal dysfunction often occurs in the client with diabetes. Proteinuria is a result of renal dysfunction. Specific gravity is elevated with dehydration. Elevated capillary blood glucose levels and ketones in the urine are consistent with diabetes mellitus but are not specific to renal function.

DIF:Applying/Application REF: 1308

KEYiabetes mellitus| renal failure

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

30.A nurse develops a dietary plan for a client with diabetes mellitus and new-onset microalbuminuria. Which component of the clients diet should the nurse decrease?

a. Carbohydrates
b. Proteins
c. Fats
d. Total calories

ANS: B

Restriction of dietary protein to 0.8 g/kg of body weight per day is recommended for clients with microalbuminuria to delay progression to renal failure. The clients diet does not need to be decreased in carbohydrates, fats, or total calories.

DIF:Remembering/Knowledge REF: 1309

KEYiabetes mellitus| nutritional requirements

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

31.A nurse assesses a client who has diabetes mellitus and notes the client is awake and alert, but shaky, diaphoretic, and weak. Five minutes after administering a half-cup of orange juice, the clients clinical manifestations have not changed. Which action should the nurse take next?

a. Administer another half-cup of orange juice.
b. Administer a half-ampule of dextrose 50% intravenously.
c. Administer 10 units of regular insulin subcutaneously.
d. Administer 1 mg of glucagon intramuscularly.

ANS: A

This client is experiencing mild hypoglycemia. For mild hypoglycemic manifestations, the nurse should administer oral glucose in the form of orange juice. If the symptoms do not resolve immediately, the treatment should be repeated. The client does not need intravenous dextrose, insulin, or glucagon.

DIF:Applying/Application REF: 1310

KEYiabetes mellitus| hypoglycemia

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

32.A nurse reviews the laboratory results of a client who is receiving intravenous insulin. Which should alert the nurse to intervene immediately?

a. Serum chloride level of 98 mmol/L
b. Serum calcium level of 8.8 mg/dL
c. Serum sodium level of 132 mmol/L
d. Serum potassium level of 2.5 mmol/L

ANS: D

Insulin activates the sodium-potassium ATPase pump, increasing the movement of potassium from the extracellular fluid into the intracellular fluid, resulting in hypokalemia. In hyperglycemia, hypokalemia can also result from excessive urine loss of potassium. The chloride level is normal. The calcium and sodium levels are slightly low, but this would not be related to hyperglycemia and insulin administration.

DIF:Applying/Application REF: 1305

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

33.A nurse teaches a client with diabetes mellitus about sick day management. Which statement should the nurse include in this clients teaching?

a. When ill, avoid eating or drinking to reduce vomiting and diarrhea.
b. Monitor your blood glucose levels at least every 4 hours while sick.
c. If vomiting, do not use insulin or take your oral antidiabetic agent.
d. Try to continue your prescribed exercise regimen even if you are sick.

ANS: B

When ill, the client should monitor his or her blood glucose at least every 4 hours. The client should continue taking the medication regimen while ill. The client should continue to eat and drink as tolerated but should not exercise while sick.

DIF:Applying/Application REF: 1315

KEY: Diabetes mellitus| hyperglycemia MSC: Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

34.A nurse assesses a client who is being treated for hyperglycemic-hyperosmolar state (HHS). Which clinical manifestation indicates to the nurse that the therapy needs to be adjusted?

a. Serum potassium level has increased.
b. Blood osmolarity has decreased.
c. Glasgow Coma Scale score is unchanged.
d. Urine remains negative for ketone bodies.

ANS: C

A slow but steady improvement in central nervous system functioning is the best indicator of therapy effectiveness for HHS. Lack of improvement in the level of consciousness may indicate inadequate rates of fluid replacement. The Glasgow Coma Scale assesses the clients state of consciousness against criteria of a scale including best eye, verbal, and motor responses. An increase in serum potassium, decreased blood osmolality, and urine negative for ketone bodies do not indicate adequacy of treatment.

DIF:Applying/Application REF: 1310

KEYiabetes mellitus| hyperglycemia

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

35.A nurse cares for a client who has diabetes mellitus. The nurse administers 6 units of regular insulin and 10 units of NPH insulin at 0700. At which time should the nurse assess the client for potential problems related to the NPH insulin?

a. 0800
b. 1600
c. 2000
d. 2300

ANS: B

Neutral protamine Hagedorn (NPH) is an intermediate-acting insulin with an onset of 1.5 hours, peak of 4 to 12 hours, and duration of action of 22 hours. Checking the client at 0800 would be too soon. Checking the client at 2000 and 2300 would be too late. The nurse should check the client at 1600.

DIF:Applying/Application REF: 1294

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Nursing Process: Planning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

36.After teaching a client with type 2 diabetes mellitus, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?

a. I need to have an annual appointment even if my glucose levels are in good control.
b. Since my diabetes is controlled with diet and exercise, I must be seen only if I am sick.
c. I can still develop complications even though I do not have to take insulin at this time.
d. If I have surgery or get very ill, I may have to receive insulin injections for a short time.

ANS: B

Clients with diabetes need to be seen at least annually to monitor for long-term complications, including visual changes, microalbuminuria, and lipid analysis. The client may develop complications and may need insulin in the future.

DIF:Applying/Application REF: 1299

KEYiabetes mellitus| patient education

MSC:Integrated Process: Teaching/Learning

NOT:Client Needs Category: Health Promotion and Maintenance

37.When teaching a client recently diagnosed with type 1 diabetes mellitus, the client states, I will never be able to stick myself with a needle. How should the nurse respond?

a. I can give your injections to you while you are here in the hospital.
b. Everyone gets used to giving themselves injections. It really does not hurt.
c. Your disease will not be managed properly if you refuse to administer the shots.

d. Tell me what it is about the injections that are concerning you.

ANS: D

Devote as much teaching time as possible to insulin injection and blood glucose monitoring. Clients with newly diagnosed diabetes are often fearful of giving themselves injections. If the client is worried about giving the injections, it is best to try to find out what specifically is causing the concern, so it can be addressed. Giving the injections for the client does not promote self-care ability. Telling the client that others give themselves injections may cause the client to feel bad. Stating that you dont know another way to manage the disease is dismissive of the clients concerns.

DIF:Applying/Application REF: 1318

KEYiabetes mellitus| insulin| psychosocial response

MSC:Integrated Process: Caring

NOT: Client Needs Category: Psychosocial Integrity

38.A nurse assesses a client with diabetes mellitus who self-administers subcutaneous insulin. The nurse notes a spongy, swelling area at the site the client uses most frequently for insulin injection. Which action should the nurse take?

a. Apply ice to the site to reduce inflammation.
b. Consult the provider for a new administration route.
c. Assess the client for other signs of cellulitis.
d. Instruct the client to rotate sites for insulin injection.

ANS: D

The clients tissue has been damaged from continuous use of the same site. The client should be educated to rotate sites. The damaged tissue is not caused by cellulitis or any type infection, and applying ice may cause more damage to the tissue. Insulin can only be administered subcutaneously and intravenously. It would not be appropriate or practical to change the administration route.

DIF:Applying/Application REF: 1319

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

39.A nurse reviews the medication list of a client recovering from a computed tomography (CT) scan with IV contrast to rule out small bowel obstruction. Which medication should alert the nurse to contact the provider and withhold the prescribed dose?

a. Pioglitazone (Actos)
b. Glimepiride (Amaryl)
c. Glipizide (Glucotrol)
d. Metformin (Glucophage)

ANS: D

Glucophage should not be administered when the kidneys are attempting to excrete IV contrast from the body.

This combination would place the client at high risk for kidney failure. The nurse should hold the metformin dose and contact the provider. The other medications are safe to administer after receiving IV contrast.

DIF:Applying/Application REF: 1290

KEYiabetes mellitus| oral antidiabetic medications| medication safety

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

40.After teaching a client who is newly diagnosed with type 2 diabetes mellitus, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?

a. I should increase my intake of vegetables with higher amounts of dietary fiber.
b. My intake of saturated fats should be no more than 10% of my total calorie intake.
c. I should decrease my intake of protein and eliminate carbohydrates from my diet.
d. My intake of water is not restricted by my treatment plan or medication regimen.

ANS: C

The client should not completely eliminate carbohydrates from the diet, and should reduce protein if microalbuminuria is present. The client should increase dietary intake of complex carbohydrates, including vegetables, and decrease intake of fat. Water does not need to be restricted unless kidney failure is present.

DIF:Applying/Application REF: 1302

KEYiabetes mellitus| nutritional requirements

MSC:Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

41.A nurse reviews laboratory results for a client with diabetes mellitus who is prescribed an intensified insulin regimen:

Fasting blood glucose: 75 mg/dL

Postprandial blood glucose: 200 mg/dL

Hemoglobin A_{1c} level: 5.5%

How should the nurse interpret these laboratory findings?

a. Increased risk for developing ketoacidosis
b. Good control of blood glucose
c. Increased risk for developing hyperglycemia
d. Signs of insulin resistance

ANS: B

The client is maintaining blood glucose levels within the defined ranges for goals in an intensified regimen. Because the clients glycemic control is good, he or she is not at higher risk for ketoacidosis or hyperglycemia and is not showing signs of insulin resistance.

DIF:Applying/Application REF: 1294

KEYiabetes mellitus| laboratory values

MSC:Integrated Process: Nursing Process: Evaluation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

42.A nurse prepares to administer insulin to a client at 1800. The clients medication administration record contains the following information:

Insulin glargine: 12 units daily at 1800

Regular insulin: 6 units QID at 0600, 1200, 1800, 2400

Based on the clients medication administration record, which action should the nurse take?

a. Draw up and inject the insulin glargine first, and then draw up and inject the regular insulin.
b. Draw up and inject the insulin glargine first, wait 20 minutes, and then draw up and inject the regular insulin.
c. First draw up the dose of regular insulin, then draw up the dose of insulin glargine in the same syringe, mix, and inject the two insulins together.
d. First draw up the dose of insulin glargine, then draw up the dose of regular insulin in the same syringe, mix, and inject the two insulins together.

ANS: A

Insulin glargine must not be diluted or mixed with any other insulin or solution. Mixing results in an unpredictable alteration in the onset of action and time to peak action. The correct instruction is to draw up and inject first the glargine and then the regular insulin right afterward.

DIF:Applying/Application REF: 1294

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

43.A nurse prepares to administer prescribed regular and NPH insulin. Place the nurses actions in the correct order to administer these medications.

1. Inspect bottles for expiration dates.
2. Gently roll the bottle of NPH between the hands.
3. Wash your hands.
4. Inject air into the regular insulin.
5. Withdraw the NPH insulin.
6. Withdraw the regular insulin.
7. Inject air into the NPH bottle.
8. Clean rubber stoppers with an alcohol swab.

a. 1, 3, 8, 2, 4, 6, 7, 5

b. 3, 1, 2, 8, 7, 4, 6, 5
c. 8, 1, 3, 2, 4, 6, 7, 5
d. 2, 3, 1, 8, 7, 5, 4, 6

ANS: B

After washing hands, it is important to inspect the bottles and then to roll the NPH to mix the insulin. Rubber stoppers should be cleaned with alcohol after rolling the NPH and before sticking a needle into either bottle. It is important to inject air into the NPH bottle before placing the needle in a regular insulin bottle to avoid mixing of regular and NPH insulin. The shorter-acting insulin is always drawn up first.

DIF:Applying/Application REF: 1296

KEYiabetes mellitus| insulin| medication safety

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

44.A nurse reviews the chart and new prescriptions for a client with diabetic ketoacidosis:

Vital Signs and Assessment	**Laboratory Results**	**Medications**
Blood pressure: 90/62 mm Hg Pulse: 120 beats/min Respiratory rate: 28 breaths/min Urine output: 20 mL/hr via catheter	Serum potassium: 2.6 mEq/L	Potassium chloride 40 mEq IV bolus STAT Increase IV fluid to 100 mL/hr

Which action should the nurse take?

a. Administer the potassium and then consult with the provider about the fluid order.
b. Increase the intravenous rate and then consult with the provider about the potassium prescription.
c. Administer the potassium first before increasing the infusion flow rate.
d. Increase the intravenous flow rate before administering the potassium.

ANS: B

The client is acutely ill and is severely dehydrated and hypokalemic. The client requires more IV fluids and potassium. However, potassium should not be infused unless the urine output is at least 30 mL/hr. The nurse should first increase the IV rate and then consult with the provider about the potassium.

DIF:Applying/Application REF: 1313

KEYiabetes mellitus| medication safety| electrolyte imbalance

MSC:Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

45.At 4:45 p.m., a nurse assesses a client with diabetes mellitus who is recovering from an abdominal

hysterectomy 2 days ago. The nurse notes that the client is confused and diaphoretic. The nurse reviews the assessment data provided in the chart below:

Capillary Blood Glucose Testing (AC/HS)	**Dietary Intake**
At 0630: 95	Breakfast: 10% eaten client states she is not hungry
At 1130: 70	Lunch: 5% eaten client is nauseous; vomits once
At 1630: 47	

After reviewing the clients assessment data, which action is appropriate at this time?

a. Assess the clients oxygen saturation level and administer oxygen.
b. Reorient the client and apply a cool washcloth to the clients forehead.
c. Administer dextrose 50% intravenously and reassess the client.
d. Provide a glass of orange juice and encourage the client to eat dinner.

ANS: C

The clients symptoms are related to hypoglycemia. Since the client has not been tolerating food, the nurse should administer dextrose intravenously. The clients oxygen level could be checked, but based on the information provided, this is not the priority. The client will not be reoriented until the glucose level rises.

DIF:Applying/Application REF: 1314

KEYiabetes mellitus| hypoglycemia

MSC:Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1.A nurse assesses clients at a health fair. Which clients should the nurse counsel to be tested for diabetes? **(Select all that apply.)**

a. 56-year-old African-American male
b. Female with a 30-pound weight gain during pregnancy
c. Male with a history of pancreatic trauma
d. 48-year-old woman with a sedentary lifestyle
e. Male with a body mass index greater than 25 kg/m2
f. 28-year-old female who gave birth to a baby weighing 9.2 pounds

ANS: A, D, E, F

Risk factors for type 2 diabetes include certain ethnic/racial groups (African Americans, American Indians, Hispanics), obesity and physical inactivity, and giving birth to large babies. Pancreatic trauma and a 30-pound gestational weight gain are not risk factors.

DIF:Applying/Application REF: 1287

KEYiabetes mellitus| health screening

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2.A nurse assesses a client who is experiencing diabetic ketoacidosis (DKA). For which manifestations should the nurse monitor the client? **(Select all that apply.)**

a. Deep and fast respirations
b. Decreased urine output
c. Tachycardia
d. Dependent pulmonary crackles
e. Orthostatic hypotension

ANS: A, C, E

DKA leads to dehydration, which is manifested by tachycardia and orthostatic hypotension. Usually clients have Kussmaul respirations, which are fast and deep. Increased urinary output (polyuria) is severe. Because of diuresis and dehydration, peripheral edema and crackles do not occur.

DIF:Applying/Application REF: 1313

KEYiabetes mellitus| hyperglycemia

MSC:Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3.A nurse teaches a client with diabetes mellitus about foot care. Which statements should the nurse include in this clients teaching? **(Select all that apply.)**

a. Do not walk around barefoot.
b. Soak your feet in a tub each evening.
c. Trim toenails straight across with a nail clipper.
d. Treat any blisters or sores with Epsom salts.
e. Wash your feet every other day.

ANS: A, C

Clients who have diabetes mellitus are at high risk for wounds on the feet secondary to peripheral neuropathy and poor arterial circulation. The client should be instructed to not walk around barefoot or wear sandals with open toes. These actions place the client at higher risk for skin breakdown of the feet. The client should be instructed to trim toenails straight across with a nail clipper. Feet should be washed daily with lukewarm water and soap, but feet should not be soaked in the tub. The client should contact the provider immediately if blisters or sores appear and should not use home remedies to treat these wounds.

DIF:Understanding/Comprehension REF: 1307

KEY: Diabetes mellitus| foot care MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4.A nurse provides diabetic education at a public health fair. Which disorders should the nurse include as complications of diabetes mellitus? **(Select all that apply.)**

a. Stroke
b. Kidney failure
c. Blindness
d. Respiratory failure
e. Cirrhosis

ANS: A, B, C

Complications of diabetes mellitus are caused by macrovascular and microvascular changes. Macrovascular complications include coronary artery disease, cerebrovascular disease, and peripheral vascular disease. Microvascular complications include nephropathy, retinopathy, and neuropathy. Respiratory failure and cirrhosis are not complications of diabetes mellitus.

DIF:Understanding/Comprehension REF: 1283

KEY: Diabetes mellitus| health screening MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5.A nurse collaborates with the interdisciplinary team to develop a plan of care for a client who is newly diagnosed with diabetes mellitus. Which team members should the nurse include in this interdisciplinary team meeting? **(Select all that apply.)**

a. Registered dietitian
b. Clinical pharmacist
c. Occupational therapist
d. Health care provider
e. Speech-language pathologist

ANS: A, B, D

When planning care for a client newly diagnosed with diabetes mellitus, the nurse should collaborate with a registered dietitian, clinical pharmacist, and health care provider. The focus of treatment for a newly diagnosed client would be nutrition, medication therapy, and education. The nurse could also consult with a diabetic educator. There is no need for occupational therapy or speech therapy at this time.

DIF:Applying/Application REF: 1307

KEYiabetes mellitus| collaboration

MSC:Integrated Process: Communication and Documentation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

Chapter 65: Assessment of the Renal/Urinary System

MULTIPLE CHOICE

1. A nurse reviews the urinalysis of a client and notes the presence of glucose. Which action should the nurse take?
a. Document findings and continue to monitor the client.
b. Contact the provider and recommend a 24-hour urine test.
c. Review the clients recent dietary selections.
d. Perform a capillary artery glucose assessment.

ANS: D
Glucose normally is not found in the urine. The normal renal threshold for glucose is about 220 mg/dL, which means that a person whose blood glucose is less than 220 mg/dL will not have glucose in the urine. A positive finding for glucose on urinalysis indicates high blood sugar. The most appropriate action would be to perform a capillary artery glucose assessment. The client needs further evaluation for this abnormal result; therefore, documenting and continuing to monitor is not appropriate. Requesting a 24-hour urine test or reviewing the clients dietary selections will not assist the nurse to make a clinical decision related to this abnormality.

DIF: Applying/Application REF: 1325
KEY: Urinary/renal system| assessment/diagnostic examination| capillary artery blood glucose MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse reviews the health history of a client with an oversecretion of renin. Which disorder should the nurse correlate with this assessment finding?
a. Alzheimers disease
b. Hypertension
c. Diabetes mellitus
d. Viral hepatitis

ANS: B
Renin is secreted when special cells in the distal convoluted tubule, called the macula densa, sense changes in blood volume and pressure. When the macula densa cells sense that blood volume, blood pressure, or blood sodium levels are low, renin is secreted. Renin then converts angiotensinogen into angiotensin I. This leads to a series of reactions that cause secretion of the hormone aldosterone. This hormone increases kidney reabsorption of sodium and water, increasing blood pressure, blood volume, and blood sodium levels. Inappropriate or excessive renin secretion is a major cause of persistent hypertension. Renin has no impact on Alzheimers disease, diabetes mellitus, or viral hepatitis.

DIF: Understanding/Comprehension REF: 1323
KEY: Urinary/renal system| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse reviews the urinalysis results of a client and notes a urine osmolality of 1200 mOsm/L. Which action should the nurse take?
a. Contact the provider and recommend a low-sodium diet.
b. Prepare to administer an intravenous diuretic.
c. Obtain a suction device and implement seizure precautions.
d. Encourage the client to drink more fluids.

ANS: D
Normal urine osmolality ranges from 300 to 900 mOsm/L. This clients urine is more concentrated, indicating dehydration. The nurse should encourage the client to drink more water. Dehydration can be associated with elevated serum sodium levels. Although a low-sodium diet may be appropriate for this client, this diet change will not have a significant impact on urine osmolality. A diuretic would increase urine output and decrease urine osmolality further. Low serum sodium levels, not elevated serum levels, place the client at risk for

seizure activity. These options would further contribute to the clients dehydration or elevate the osmolality.

DIF: Applying/Application REF: 1336
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A nurse assesses a client with renal insufficiency and a low red blood cell count. The client asks, Is my anemia related to the renal insufficiency? How should the nurse respond?
a. Red blood cells produce erythropoietin, which increases blood flow to the kidneys.
b. Your anemia and renal insufficiency are related to inadequate vitamin D and a loss of bone density.
c. Erythropoietin is usually released from the kidneys and stimulates red blood cell production in the bone marrow.
d. Kidney insufficiency inhibits active transportation of red blood cells throughout the blood.

ANS: C
Erythropoietin is produced in the kidney and is released in response to decreased oxygen tension in the renal blood supply. Erythropoietin stimulates red blood cell production in the bone marrow. Anemia and renal insufficiency are not manifestations of vitamin D deficiency. The kidneys do not play a role in the transportation of red blood cells or any other cells in the blood.

DIF: Remembering/Knowledge REF: 1326
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A nurse contacts the health care provider after reviewing a clients laboratory results and noting a blood urea nitrogen (BUN) of 35 mg/dL and a creatinine of 1.0 mg/dL. For which action should the nurse recommend a prescription?
a. Intravenous fluids
b. Hemodialysis
c. Fluid restriction
d. Urine culture and sensitivity

ANS: A
Normal BUN is 10 to 20 mg/dL. Normal creatinine is 0.6 to 1.2 mg/dL (males) or 0.5 to 1.1 mg/dL (females). Creatinine is more specific for kidney function than BUN, because BUN can be affected by several factors (dehydration, high-protein diet, and catabolism). This clients creatinine is normal, which suggests a non-renal cause for the elevated BUN. A common cause of increased BUN is dehydration, so the nurse should anticipate giving the client more fluids, not placing the client on fluid restrictions. Hemodialysis is not an appropriate treatment for dehydration. The lab results do not indicate an infection; therefore, a urine culture and sensitivity is not appropriate.

DIF: Applying/Application REF: 1332
KEY: Urinary/renal system| assessment/diagnostic examination| hydration
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A nurse cares for a client with an increased blood urea nitrogen (BUN)/creatinine ratio. Which action should the nurse take first?
a. Assess the clients dietary habits.
b. Inquire about the use of nonsteroidal anti-inflammatory drugs (NSAIDs).
c. Hold the clients metformin (Glucophage).
d. Contact the health care provider immediately.

ANS: A
An elevated BUN/creatinine ratio is often indicative of dehydration, urinary obstruction, catabolism, or a high-protein diet. The nurse should inquire about the clients dietary habits. Kidney damage related to NSAID use most likely would manifest with elevations in both BUN and creatinine, but no change in the ratio. The nurse

should obtain more assessment data before holding any medications or contacting the provider.

DIF: Applying/Application REF: 1332
KEY: Urinary/renal system| assessment/diagnostic examination| nutritional requirements
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A nurse cares for a client with a urine specific gravity of 1.040. Which action should the nurse take?
a. Obtain a urine culture and sensitivity.
b. Place the client on restricted fluids.
c. Assess the clients creatinine level.
d. Increase the clients fluid intake.

ANS: D
Normal specific gravity for urine is 1.005 to 1.030. A high specific gravity can occur with dehydration, decreased kidney blood flow (often because of dehydration), and the presence of antidiuretic hormone. Increasing the clients fluid intake would be a beneficial intervention. Assessing the creatinine or obtaining a urine culture would not provide data necessary for the nurse to make a clinical decision.

DIF: Applying/Application REF: 1333
KEY: Urinary/renal system| assessment/diagnostic examination| hydration
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse reviews laboratory results for a client who was admitted for a myocardial infarction and cardiogenic shock 2 days ago. Which laboratory test result should the nurse expect to find?
a. Blood urea nitrogen (BUN) of 52 mg/dL
b. Creatinine of 2.3 mg/dL
c. BUN of 10 mg/dL
d. BUN/creatinine ratio of 8:1

ANS: A
Shock leads to decreased renal perfusion. An elevated BUN accompanies this condition. The creatinine should be normal because no kidney damage occurred. A low BUN signifies overhydration, malnutrition, or liver damage. A low BUN/creatinine ratio indicates fluid volume excess or acute renal tubular acidosis.

DIF: Applying/Application REF: 1336
KEY: Urinary/renal system| assessment/diagnostic examination| shock
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A nurse cares for a client with a urine specific gravity of 1.018. Which action should the nurse take?
a. Evaluate the clients intake and output for the past 24 hours.
b. Document the finding in the chart and continue to monitor.
c. Obtain a specimen for a urine culture and sensitivity.
d. Encourage the client to drink more fluids, especially water.

ANS: B
This specific gravity is within the normal range for urine. There is no need to evaluate the clients intake and output, obtain a urine specimen, or increase fluid intake.

DIF: Applying/Application REF: 1333
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A nurse cares for a client who has elevated levels of antidiuretic hormone (ADH). Which disorder should the nurse identify as a trigger for the release of this hormone?
a. Pneumonia

b. Dehydration
c. Renal failure
d. Edema

ANS: B
ADH increases tubular permeability to water, leading to absorption of more water into the capillaries. ADH is triggered by a rising extracellular fluid osmolarity, as occurs in dehydration. Pneumonia, renal failure, and edema would not trigger the release of ADH.

DIF: Understanding/Comprehension REF: 1332
KEY: Urinary/renal system| assessment/diagnostic examination| hydration
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A nurse reviews a female clients laboratory results. Which results from the clients urinalysis should the nurse recognize as abnormal?
a. pH 5.6
b. Ketone bodies present
c. Specific gravity of 1.020
d. Clear and yellow color

ANS: B
Ketone bodies are by-products of incomplete metabolism of fatty acids. Normally no ketones are present in urine. Ketone bodies are produced when fat sources are used instead of glucose to provide cellular energy. A pH between 4.6 and 8, specific gravity between 1.005 and 1.030, and clear yellow urine are normal findings for a female clients urinalysis.

DIF: Remembering/Knowledge REF: 1333
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

12. A nurse reviews the allergy list of a client who is scheduled for an intravenous urography. Which client allergy should alert the nurse to urgently contact the health care provider?
a. Seafood
b. Penicillin
c. Bee stings
d. Red food dye

ANS: A
Clients with seafood allergies often have severe allergic reactions to the standard dyes used during intravenous urography. The other allergies have no impact on the clients safety during an intravenous urography.

DIF: Applying/Application REF: 1338
KEY: Urinary/renal system| assessment/diagnostic examination| allergies
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A nurse cares for a client with diabetes mellitus who is prescribed metformin (Glucophage) and is scheduled for an intravenous urography. Which action should the nurse take first?
a. Contact the provider and recommend discontinuing the metformin.
b. Keep the client NPO for at least 6 hours prior to the examination.
c. Check the clients capillary artery blood glucose and administer prescribed insulin.
d. Administer intravenous fluids to dilute and increase the excretion of dye.

ANS: A
Metformin can cause lactic acidosis and renal impairment as the result of an interaction with the dye. This drug must be discontinued for 48 hours before the procedure and not started again after the procedure until urine output is well established. The clients health care provider needs to provide alternative therapy for the client

until the metformin can be resumed. Keeping the client NPO, checking the clients blood glucose, and administering intravenous fluids should be part of the clients plan of care, but are not the priority, as the examination should not occur while the client is still taking metformin.

DIF: Applying/Application REF: 1338
KEY: Urinary/renal system| diabetes mellitus| medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

14. A nurse teaches a client who is recovering from a urography. Which instruction should the nurse include in this clients discharge teaching?
a. Avoid direct contact with your urine for 24 hours until the radioisotope clears.
b. You may have some dribbling of urine for several weeks after this procedure.
c. Be sure to drink at least 3 liters of fluids today to help eliminate the dye faster.
d. Your skin may become slightly yellow from the dye used in this procedure.

ANS: C
Dyes used in urography are potentially nephrotoxic. A large fluid intake will help the client eliminate the dye rapidly. Dyes used in urography are not radioactive, the client should not experience any dribbling of urine, and the dye should not change the color of the clients skin.

DIF: Applying/Application REF: 1338
KEY: Urinary/renal system| assessment/diagnostic examination| hydration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

15. A nurse cares for a client who is recovering from a closed percutaneous kidney biopsy. The client states, My pain has suddenly increased from a 3 to a 10 on a scale of 0 to 10. Which action should the nurse take first?
a. Reposition the client on the operative side.
b. Administer the prescribed opioid analgesic.
c. Assess the pulse rate and blood pressure.
d. Examine the color of the clients urine.

ANS: C
An increase in the intensity of pain after a percutaneous kidney biopsy is a symptom of internal hemorrhage. A change in vital signs can indicate that hemorrhage is occurring. Before other actions, the nurse must assess the clients hemodynamic status.

DIF: Applying/Application REF: 1340
KEY: Urinary/renal system| assessment/diagnostic examination| hemorrhage
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16. A nurse obtains a sterile urine specimen from a clients Foley catheter. After applying a clamp to the drainage tubing distal to the injection port, which action should the nurse take next?
a. Clamp another section of the tube to create a fixed sample section for retrieval.
b. Insert a syringe into the injection port and aspirate the quantity of urine required.
c. Clean the injection port cap of the drainage tubing with povidone-iodine solution.
d. Withdraw 10 mL of urine and discard it; then withdraw a fresh sample of urine.

ANS: C
It is important to clean the injection port cap of the catheter drainage tubing with an appropriate antiseptic, such as povidone-iodine solution or alcohol. This will help prevent surface contamination before injection of the syringe. The urine sample should be collected directly from the catheter; therefore, a second clamp to create a sample section would not be appropriate. Every sample from the catheter is usable; there is the need to discard the first sample.

DIF: Understanding/Comprehension REF: 1334

KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

17. A nurse cares for a client who is having trouble voiding. The client states, I cannot urinate in public places. How should the nurse respond?
a. I will turn on the faucet in the bathroom to help stimulate your urination.
b. I can recommend a prescription for a diuretic to improve your urine output.
c. Ill move you to a room with a private bathroom to increase your comfort.
d. I will close the curtain to provide you with as much privacy as possible.

ANS: D
The nurse should provide privacy to clients who may be uncomfortable or have issues related to elimination or the urogenital area. Turning on the faucet and administering a diuretic will not address the clients concern. Although moving the client to a private room with a private bathroom would be nice, this is not realistic. The nurse needs to provide as much privacy as possible within the clients current room.

DIF: Applying/Application REF: 1340
KEY: Urinary/renal system| patient-centered care
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

18. After delegating to an unlicensed assistive personnel (UAP) the task of completing a bladder scan examination for a client, the nurse evaluates the UAPs performance. Which action by the UAP indicates the nurse must provide additional instructions when delegating this task?
a. Selecting the female icon for all female clients and male icon for all male clients
b. Telling the client, This test measures the amount of urine in your bladder.
c. Applying ultrasound gel to the scanning head and removing it when finished
d. Taking at least two readings using the aiming icon to place the scanning head

ANS: A
The UAP should use the female icon for women who have not had a hysterectomy. This allows the scanner to subtract the volume of the uterus from readings. If a woman has had a hysterectomy, the UAP should choose the male icon. The UAP should explain the procedure to the client, apply gel to the scanning head and clean it after use, and take at least two readings.

DIF: Applying/Application REF: 1337
KEY: Urinary/renal system| delegation| supervision| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. A nurse reviews a clients laboratory results. Which results from the clients urinalysis should the nurse identify as normal? (Select all that apply.)
a. pH: 6
b. Specific gravity: 1.015
c. Protein: 1.2 mg/dL
d. Glucose: negative
e. Nitrate: small
f. Leukocyte esterase: positive

ANS: A, B, D
The pH, specific gravity, and glucose are all within normal ranges. The other values are abnormal.

DIF: Remembering/Knowledge REF: 1333
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A nurse assesses clients on the medical-surgical unit. Which clients are at risk for kidney problems? (Select all that apply.)
a. A 24-year-old pregnant woman prescribed prenatal vitamins
b. A 32-year-old bodybuilder taking synthetic creatine supplements
c. A 56-year-old who is taking metformin for diabetes mellitus
d. A 68-year-old taking high-dose nonsteroidal anti-inflammatory drugs (NSAIDs) for chronic back pain
e. A 75-year-old with chronic obstructive pulmonary disease (COPD) who is prescribed an albuterol nebulizer

ANS: B, C, D
Many medications can affect kidney function. Clients who take synthetic creatine supplements, metformin, and high-dose or long-term NSAIDs are at risk for kidney dysfunction. Prenatal vitamins and albuterol nebulizers do not place these clients at risk.

DIF: Applying/Application REF: 1333
KEY: Urinary/renal system| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A nurse assesses a client recovering from a cystoscopy. Which assessment findings should alert the nurse to urgently contact the health care provider? (Select all that apply.)
a. Decrease in urine output
b. Tolerating oral fluids
c. Prescription for metformin
d. Blood clots present in the urine
e. Burning sensation when urinating

ANS: A, D
The nurse should monitor urine output and contact the provider if urine output decreases or becomes absent. The nurse should also assess for blood in the clients urine. The urine may be pink-tinged, but gross bleeding or blood clots should not be present. If bleeding is present, the nurse should urgently contact the provider. Tolerating oral fluids is a positive outcome and does not need intervention. Metformin would be a concern if the client received dye; no dye is used in a cystoscopy procedure. The client may experience a burning sensation when urinating after this procedure; this would not require a call to the provider.

DIF: Applying/Application REF: 1329
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse prepares a client for a percutaneous kidney biopsy. Which actions should the nurse take prior to this procedure? (Select all that apply.)
a. Keep the client NPO for 4 to 6 hours.
b. Obtain coagulation study results.
c. Maintain strict bedrest in a supine position.
d. Assess for blood in the clients urine.
e. Administer antihypertensive medications.

ANS: A, B, E
Prior to a percutaneous kidney biopsy, the client should be NPO for 4 to 6 hours. Coagulation studies should be completed to prevent bleeding after the biopsy. Blood pressure medications should be administered to prevent hypertension before and after the procedure. There is no need to keep the client on bedrest or assess for blood in the clients urine prior to the procedure; these interventions should be implemented after a percutaneous kidney biopsy.

DIF: Applying/Application REF: 1339
KEY: Urinary/renal system| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse plans care for an older adult client. Which interventions should the nurse include in this clients plan of care to promote kidney health? (Select all that apply.)
a. Ensure adequate fluid intake.
b. Leave the bathroom light on at night.
c. Encourage use of the toilet every 6 hours.
d. Delegate bladder training instructions to the unlicensed assistive personnel (UAP).
e. Provide thorough perineal care after each voiding.
f. Assess for urinary retention and urinary tract infection.

ANS: A, B, E, F
The nurse should ensure that the client receives adequate fluid intake and has adequate lighting to ambulate safely to the bathroom at night, encourage the client to use the toilet every 2 hours, provide thorough perineal care after each voiding, and assess for urinary retention and urinary tract infections. The nurse should not delegate any teaching to the UAP, including bladder training instructions. The UAP may participate in bladder training activities, including encouraging and assisting the client to the bathroom at specific times.

DIF: Understanding/Comprehension REF: 1328
KEY: Urinary/renal system| older adult| safety| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 66: Care of Patients with Urinary Problems

MULTIPLE CHOICE

1. A nurse assesses clients on the medical-surgical unit. Which client is at greatest risk for the development of bacterial cystitis?
a. A 36-year-old female who has never been pregnant
b. A 42-year-old male who is prescribed cyclophosphamide
c. A 58-year-old female who is not taking estrogen replacement
d. A 77-year-old male with mild congestive heart failure

ANS: C
Females at any age are more susceptible to cystitis than men because of the shorter urethra in women. Postmenopausal women who are not on hormone replacement therapy are at increased risk for bacterial cystitis because of changes in the cells of the urethra and vagina. The middle-aged woman who has never been pregnant would not have a risk potential as high as the older woman who is not using hormone replacement therapy.

DIF: Understanding/Comprehension REF: 1344
KEY: Cystitis| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A nurse reviews the laboratory findings of a client with a urinary tract infection. The laboratory report notes a shift to the left in a clients white blood cell count. Which action should the nurse take?
a. Request that the laboratory perform a differential analysis on the white blood cells.
b. Notify the provider and start an intravenous line for parenteral antibiotics.
c. Collaborate with the unlicensed assistive personnel (UAP) to strain the clients urine for renal calculi.
d. Assess the client for a potential allergic reaction and anaphylactic shock.

ANS: B
An increase in band cells creates a shift to the left. A left shift most commonly occurs with urosepsis and is seen rarely with uncomplicated urinary tract infections. The nurse will be administering antibiotics, most likely via IV, so he or she should notify the provider and prepare to give the antibiotics. The shift to the left is part of a differential white blood cell count. The nurse would not need to strain urine for stones. Allergic reactions are associated with elevated eosinophil cells, not band cells.

DIF: Applying/Application REF: 1347
KEY: Cystitis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse cares for a postmenopausal client who has had two episodes of bacterial urethritis in the last 6 months. The client asks, I never have urinary tract infections. Why is this happening now? How should the nurse respond?
a. Your immune system becomes less effective as you age.
b. Low estrogen levels can make the tissue more susceptible to infection.
c. You should be more careful with your personal hygiene in this area.
d. It is likely that you have an untreated sexually transmitted disease.

ANS: B
Low estrogen levels decrease moisture and secretions in the perineal area and cause other tissue changes, predisposing it to the development of infection. Urethritis is most common in postmenopausal women for this reason. Although immune function does decrease with aging and sexually transmitted diseases are a known cause of urethritis, the most likely reason in this client is low estrogen levels. Personal hygiene usually does not contribute to this disease process.

DIF: Applying/Application REF: 1344

KEY: Cystitis| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. After teaching a client with bacterial cystitis who is prescribed phenazopyridine (Pyridium), the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?
a. I will not take this drug with food or milk.
b. If I think I am pregnant, I will stop the drug.
c. An orange color in my urine should not alarm me.
d. I will drink two glasses of cranberry juice daily.

ANS: C
Phenazopyridine discolors urine, most commonly to a deep reddish orange. Many clients think they have blood in their urine when they see this. In addition, the urine can permanently stain clothing. Phenazopyridine is safe to take if the client is pregnant. There are no dietary restrictions or needs while taking this medication.

DIF: Applying/Application REF: 1349
KEY: Cystitis| medication safety MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. After teaching a client who has stress incontinence, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. I will limit my total intake of fluids.
b. I must avoid drinking alcoholic beverages.
c. I must avoid drinking caffeinated beverages.
d. I shall try to lose about 10% of my body weight.

ANS: A
Limiting fluids concentrates urine and can irritate tissues, leading to increased incontinence. Many people try to manage incontinence by limiting fluids. Alcoholic and caffeinated beverages are bladder stimulants. Obesity increases intra-abdominal pressure, causing incontinence.

DIF: Applying/Application REF: 1357
KEY: Cystitis| hydration
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

6. A nurse cares for adult clients who experience urge incontinence. For which client should the nurse plan a habit training program?
a. A 78-year-old female who is confused
b. A 65-year-old male with diabetes mellitus
c. A 52-year-old female with kidney failure
d. A 47-year-old male with arthritis

ANS: A
For a bladder training program to succeed in a client with urge incontinence, the client must be alert, aware, and able to resist the urge to urinate. Habit training will work best for a confused client. This includes going to the bathroom (or being assisted to the bathroom) at set times. The other clients may benefit from another type of bladder training.

DIF: Applying/Application REF: 1357
KEY: Urinary incontinence| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. After delegating care to an unlicensed assistive personnel (UAP) for a client who is prescribed habit training to manage incontinence, a nurse evaluates the UAPs understanding. Which action indicates the UAP needs additional teaching?
a. Toileting the client after breakfast

b. Changing the clients incontinence brief when wet
c. Encouraging the client to drink fluids
d. Recording the clients incontinence episodes

ANS: B
Habit training is undermined by the use of absorbent incontinence briefs or pads. The nurse should re-educate the UAP on the technique of habit training. The UAP should continue to toilet the client after meals, encourage the client to drink fluids, and record incontinent episodes.

DIF: Applying/Application REF: 1358
KEY: Urinary incontinence| delegation| supervision| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. A nurse plans care for a client with overflow incontinence. Which intervention should the nurse include in this clients plan of care to assist with elimination?
a. Stroke the medial aspect of the thigh.
b. Use intermittent catheterization.
c. Provide digital anal stimulation.
d. Use the Valsalva maneuver.

ANS: D
In clients with overflow incontinence, the voiding reflex arc is not intact. Mechanical pressure, such as that achieved through the Valsalva maneuver (holding the breath and bearing down as if to defecate), can initiate voiding. Stroking the medial aspect of the thigh or providing digital anal stimulation requires the reflex arc to be intact to initiate elimination. Due to the high risk for infection, intermittent catheterization should only be implemented when other interventions are not successful.

DIF: Applying/Application REF: 1358
KEY: Urinary incontinence
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

9. A confused client with pneumonia is admitted with an indwelling catheter in place. During interdisciplinary rounds the following day, which question should the nurse ask the primary health care provider?
a. Do you want daily weights on this client?
b. Will the client be able to return home?
c. Can we discontinue the indwelling catheter?
d. Should we get another chest x-ray today?

ANS: C
An indwelling catheter dramatically increases the risks of urinary tract infection and urosepsis. Nursing staff should ensure that catheters are left in place only as long as they are medically needed. The nurse should inquire about removing the catheter. All other questions might be appropriate, but because of client safety, this question takes priority.

DIF: Applying/Application REF: 1345
KEY: Infection control
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. After teaching a client with a history of renal calculi, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?
a. I should drink at least 3 liters of fluid every day.
b. I will eliminate all dairy or sources of calcium from my diet.
c. Aspirin and aspirin-containing products can lead to stones.
d. The doctor can give me antibiotics at the first sign of a stone.

ANS: A

Dehydration contributes to the precipitation of minerals to form a stone. Although increased intake of calcium causes hypercalcemia and leads to excessive calcium filtered into the urine, if the client is well hydrated the calcium will be excreted without issues. Dehydration increases the risk for supersaturation of calcium in the urine, which contributes to stone formation. The nurse should encourage the client to drink more fluids, not decrease calcium intake. Ingestion of aspirin or aspirin-containing products does not cause a stone. Antibiotics neither prevent nor treat a stone.

DIF: Applying/Application REF: 1361
KEY: Urolithiasis| hydration
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Health Promotion and Maintenance

11. A nurse cares for a client who has kidney stones from secondary hyperoxaluria. Which medication should the nurse anticipate administering?
a. Phenazopyridine (Pyridium)
b. Propantheline (Pro-Banthine)
c. Tolterodine (Detrol LA)
d. Allopurinol (Zyloprim)

ANS: D
Stones caused by secondary hyperoxaluria respond to allopurinol (Zyloprim). Phenazopyridine is given to clients with urinary tract infections. Propantheline is an anticholinergic. Tolterodine is an anticholinergic with smooth muscle relaxant properties.

DIF: Applying/Application REF: 1363
KEY: Urolithiasis| medications
MSC: Integrated Process: Nursing Process: Planning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

12. A nurse assesses a client who is recovering from extracorporeal shock wave lithotripsy for renal calculi. The nurse notes an ecchymotic area on the clients right lower back. Which action should the nurse take?
a. Administer fresh-frozen plasma.
b. Apply an ice pack to the site.
c. Place the client in the prone position.
d. Obtain serum coagulation test results.

ANS: B
The shock waves from lithotripsy can cause bleeding into the tissues through which the waves pass. Application of ice can reduce the extent and discomfort of the bruising. Although coagulation test results and fresh-frozen plasma are used to assess and treat bleeding disorders, ecchymosis after this procedure is not unusual and does not warrant a higher level of intervention. Changing the clients position will not decrease bleeding.

DIF: Applying/Application REF: 1363
KEY: Urolithiasis| postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. A nurse cares for a client admitted from a nursing home after several recent falls. What prescription should the nurse complete first?
a. Obtain urine sample for culture and sensitivity.
b. Administer intravenous antibiotics.
c. Encourage protein intake and additional fluids.
d. Consult physical therapy for gait training.

ANS: A
Although all interventions are or might be important, obtaining a urine sample for urinalysis takes priority. Often urinary tract infection (UTI) symptoms in older adults are atypical, and a UTI may present with new onset of confusion or falling. The urine sample should be obtained before starting antibiotics. Dietary

requirements and gait training should be implemented after obtaining the urine sample.

DIF: Applying/Application REF: 1364
KEY: Cystitis| assessment/diagnostic examination| older adult
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A nurse assesses clients on the medical-surgical unit. Which client is at greatest risk for bladder cancer?
a. A 25-year-old female with a history of sexually transmitted diseases
b. A 42-year-old male who has worked in a lumber yard for 10 years
c. A 55-year-old female who has had numerous episodes of bacterial cystitis
d. An 86-year-old male with a 50pack-year cigarette smoking history

ANS: D
The greatest risk factor for bladder cancer is a long history of tobacco use. The other factors would not necessarily contribute to the development of this specific type of cancer.

DIF: Remembering/Knowledge REF: 1365
KEY: Urothelial cancer| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

15. A nurse assesses a client with bladder cancer who is recovering from a complete cystectomy with ileal conduit. Which assessment finding should alert the nurse to urgently contact the health care provider?
a. The ileostomy is draining blood-tinged urine.
b. There is serous sanguineous drainage present on the surgical dressing.
c. The ileostomy stoma is pale and cyanotic in appearance.
d. Oxygen saturations are 92% on room air.

ANS: C
A pale or cyanotic stoma indicates impaired circulation to the stoma and must be treated to prevent necrosis. Blood-tinged urine and serous sanguineous drainage are expected after this type of surgery. Oxygen saturation of 92% on room air is at the low limit of normal.

DIF: Applying/Application REF: 1367
KEY: Urothelial cancer| postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

16. A nurse obtains the health history of a client with a suspected diagnosis of bladder cancer. Which question should the nurse ask when determining this clients risk factors?
a. Do you smoke cigarettes?
b. Do you use any alcohol?
c. Do you use recreational drugs?
d. Do you take any prescription drugs?

ANS: A
Smoking is known to be a factor that greatly increases the risk of bladder cancer. Alcohol use, recreational drug use, and prescription drug use (except medications that contain phenacetin) are not known to increase the risk of developing bladder cancer.

DIF: Applying/Application REF: 1365
KEY: Urothelial cancer| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

17. A nurse cares for a client who is scheduled for the surgical creation of an ileal conduit. The client states, I am anxious about having an ileal conduit. What is it like to have this drainage tube? How should the nurse respond?

a. I will ask the provider to prescribe you an antianxiety medication.
b. Would you like to discuss the procedure with your doctor once more?
c. I think it would be nice to not have to worry about finding a bathroom.
d. Would you like to speak with someone who has an ileal conduit?

ANS: D
The goal for the client who is scheduled to undergo a procedure such as an ileal conduit is to have a positive self-image and a positive attitude about his or her body. Discussing the procedure candidly with someone who has undergone the same procedure will foster such feelings, especially when the current client has an opportunity to ask questions and voice concerns to someone with first-hand knowledge. Medications for anxiety will not promote a positive self-image and a positive attitude, nor will discussing the procedure once more with the physician or hearing the nurses opinion.

DIF: Applying/Application REF: 1367
KEY: Urothelial cancer| psychosocial response| coping
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

18. A nurse teaches a young female client who is prescribed amoxicillin (Amoxil) for a urinary tract infection. Which statement should the nurse include in this clients teaching?
a. Use a second form of birth control while on this medication.
b. You will experience increased menstrual bleeding while on this drug.
c. You may experience an irregular heartbeat while on this drug.
d. Watch for blood in your urine while taking this medication.

ANS: A
The client should use a second form of birth control because penicillin seems to reduce the effectiveness of estrogen-containing contraceptives. She should not experience increased menstrual bleeding, an irregular heartbeat, or blood in her urine while taking the medication.

DIF: Understanding/Comprehension REF: 1348
KEY: Cystitis| medication safety MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

19. A nurse teaches a client with functional urinary incontinence. Which statement should the nurse include in this clients teaching?
a. You must clean around your catheter daily with soap and water.
b. Wash the vaginal weights with a 10% bleach solution after each use.
c. Operations to repair your bladder are available, and you can consider these.
d. Buy slacks with elastic waistbands that are easy to pull down.

ANS: D
Functional urinary incontinence occurs as the result of problems not related to the clients bladder, such as trouble ambulating or difficulty accessing the toilet. One goal is that the client will be able to manage his or her clothing independently. Elastic waistband slacks that are easy to pull down can help the client get on the toilet in time to void. The other instructions do not relate to functional urinary incontinence.

DIF: Applying/Application REF: 1359
KEY: Urinary incontinence MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

20. An emergency department nurse assesses a client with a history of urinary incontinence who presents with extreme dry mouth, constipation, and an inability to void. Which question should the nurse ask first?
a. Are you drinking plenty of water?
b. What medications are you taking?
c. Have you tried laxatives or enemas?
d. Has this type of thing ever happened before?

ANS: B

Some types of incontinence are treated with anticholinergic medications such as propantheline (Pro-Banthine). Anticholinergic side effects include dry mouth, constipation, and urinary retention. The nurse needs to assess the clients medication list to determine whether the client is taking an anticholinergic medication. If he or she is taking anticholinergics, the nurse should further assess the clients manifestations to determine if they are related to a simple side effect or an overdose. The other questions are not as helpful to understanding the current situation.

DIF: Applying/Application REF: 1355
KEY: Urinary incontinence| medication safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

21. A nurse teaches a client who is starting urinary bladder training. Which statement should the nurse include in this clients teaching?
a. Use the toilet when you first feel the urge, rather than at specific intervals.
b. Try to consciously hold your urine until the scheduled toileting time.
c. Initially try to use the toilet at least every half hour for the first 24 hours.
d. The toileting interval can be increased once you have been continent for a week.

ANS: B
The client should try to hold the urine consciously until the next scheduled toileting time. Toileting should occur at specific intervals during the training. The toileting interval should be no less than every hour. The interval can be increased once the client becomes comfortable with the interval.

DIF: Understanding/Comprehension REF: 1357
KEY: Urinary incontinence| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

22. A nurse plans care for clients with urinary incontinence. Which client is correctly paired with the appropriate intervention?
a. A 29-year-old client after a difficult vaginal delivery Habit training
b. A 58-year-old postmenopausal client who is not taking estrogen therapy Electrical stimulation
c. A 64-year-old female with Alzheimers-type senile dementia Bladder training
d. A 77-year-old female who has difficulty ambulating Exercise therapy

ANS: B
Exercise therapy and electrical stimulation are used for clients with stress incontinence related to childbirth or low levels of estrogen after menopause. Exercise therapy increases pelvic wall strength; it does not improve ambulation. Physical therapy and a bedside commode would be appropriate interventions for the client who has difficulty ambulating. Habit training is the type of bladder training that will be most effective with cognitively impaired clients. Bladder training can be used only with a client who is alert, aware, and able to resist the urge to urinate.

DIF: Applying/Application REF: 1350
KEY: Urinary incontinence
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

23. A nurse assesses a client who presents with renal calculi. Which question should the nurse ask?
a. Do any of your family members have this problem?
b. Do you drink any cranberry juice?
c. Do you urinate after sexual intercourse?
d. Do you experience burning with urination?

ANS: A
There is a strong association between family history and stone formation and recurrence. Nephrolithiasis is associated with many genetic variations; therefore, the nurse should ask whether other family members have also had renal stones. The other questions do not refer to renal calculi but instead are questions that should be

asked of a client with a urinary tract infection.

DIF: Applying/Application REF: 1361
KEY: Urolithiasis| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

24. A nurse assesses a male client who is recovering from a urologic procedure. Which assessment finding indicates an obstruction of urine flow?
a. Severe pain
b. Overflow incontinence
c. Hypotension
d. Blood-tinged urine

ANS: B
The most common manifestation of urethral stricture after a urologic procedure is obstruction of urine flow. This rarely causes pain and has no impact on blood pressure. The client may experience overflow incontinence with the involuntary loss of urine when the bladder is distended. Blood in the urine is not a manifestation of the obstruction of urine flow.

DIF: Applying/Application REF: 1350
KEY: Urethral strictures| urinary incontinence| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

25. A nurse cares for a client with urinary incontinence. The client states, I am so embarrassed. My bladder leaks like a young childs bladder. How should the nurse respond?
a. I understand how you feel. I would be mortified.
b. Incontinence pads will minimize leaks in public.
c. I can teach you strategies to help control your incontinence.
d. More women experience incontinence than you might think.

ANS: C
The nurse should accept and acknowledge the clients concerns, and assist the client to learn techniques that will allow control of urinary incontinence. The nurse should not diminish the clients concerns with the use of pads or stating statistics about the occurrence of incontinence.

DIF: Applying/Application REF: 1353
KEY: Urinary incontinence| psychosocial response| coping
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

26. A nurse provides phone triage to a pregnant client. The client states, I am experiencing a burning pain when I urinate. How should the nurse respond?
a. This means labor will start soon. Prepare to go to the hospital.
b. You probably have a urinary tract infection. Drink more cranberry juice.
c. Make an appointment with your provider to have your infection treated.
d. Your pelvic wall is weakening. Pelvic muscle exercises should help.

ANS: C
Pregnant clients with a urinary tract infection require prompt and aggressive treatment because cystitis can lead to acute pyelonephritis during pregnancy. The nurse should encourage the client to make an appointment and have the infection treated. Burning pain when urinating does not indicate the start of labor or weakening of pelvic muscles.

DIF: Applying/Application REF: 1346
KEY: Cystitis
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. A nurse assesses a client who has had two episodes of bacterial cystitis in the last 6 months. Which questions should the nurse ask? (Select all that apply.)
a. How much water do you drink every day?
b. Do you take estrogen replacement therapy?
c. Does anyone in your family have a history of cystitis?
d. Are you on steroids or other immune-suppressing drugs?
e. Do you drink grapefruit juice or orange juice daily?

ANS: A, B, D
Fluid intake, estrogen levels, and immune suppression all can increase the chance of recurrent cystitis. Family history is usually insignificant, and cranberry juice, not grapefruit or orange juice, has been found to increase the acidic pH and reduce the risk for bacterial cystitis.

DIF: Applying/Application REF: 1344
KEY: Cystitis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse teaches a client about self-catheterization in the home setting. Which statements should the nurse include in this clients teaching? (Select all that apply.)
a. Wash your hands before and after self-catheterization.
b. Use a large-lumen catheter for each catheterization.
c. Use lubricant on the tip of the catheter before insertion.
d. Self-catheterize at least twice a day or every 12 hours.
e. Use sterile gloves and sterile technique for the procedure.
f. Maintain a specific schedule for catheterization.

ANS: A, C, F
The key points in self-catheterization include washing hands, using lubricants, and maintaining a regular schedule to avoid distention and retention of urine that leads to bacterial growth. A smaller rather than a larger lumen catheter is preferred. The client needs to catheterize more often than every 12 hours. Self-catheterization in the home is a clean procedure.

DIF: Applying/Application REF: 1359
KEY: Urinary incontinence| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

3. A nurse teaches clients about the difference between urge incontinence and stress incontinence. Which statements should the nurse include in this education? (Select all that apply.)
a. Urge incontinence involves a post-void residual volume less than 50 mL.
b. Stress incontinence occurs due to weak pelvic floor muscles.
c. Stress incontinence usually occurs in people with dementia.
d. Urge incontinence can be managed by increasing fluid intake.
e. Urge incontinence occurs due to abnormal bladder contractions.

ANS: B, E
Clients who suffer from stress incontinence have weak pelvic floor muscles or urethral sphincter and cannot tighten their urethra sufficiently to overcome the increased detrusor pressure. Stress incontinence is common after childbirth, when the pelvic muscles are stretched and weakened from pregnancy and delivery. Urge incontinence occurs in people who cannot suppress the contraction signal from the detrusor muscle. Abnormal detrusor contractions may be a result of neurologic abnormalities including dementia, or may occur with no known abnormality. Post-void residual is associated with reflex incontinence, not with urge incontinence or stress incontinence. Management of urge incontinence includes decreasing fluid intake, especially in the evening hours.

DIF: Understanding/Comprehension REF: 1352

KEY: Urinary incontinence| patient education
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A nurse assesses a client with a fungal urinary tract infection (UTI). Which assessments should the nurse complete? (Select all that apply.)
a. Palpate the kidneys and bladder.
b. Assess the medical history and current medical problems.
c. Perform a bladder scan to assess post-void residual.
d. Inquire about recent travel to foreign countries.
e. Obtain a current list of medications.

ANS: B, E
Clients who are severely immunocompromised or who have diabetes mellitus are more prone to fungal UTIs. The nurse should assess for these factors by asking about medical history, current medical problems, and the current medication list. A physical examination and a post-void residual may be needed, but not until further information is obtained indicating that these examinations are necessary. Travel to foreign countries probably would not be important because, even if exposed, the client needs some degree of compromised immunity to develop a fungal UTI.

DIF: Applying/Application REF: 1354
KEY: Cystitis| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse cares for clients with urinary incontinence. Which types of incontinence are correctly paired with their clinical manifestation? (Select all that apply.)
a. Stress incontinence Urine loss with physical exertion
b. Urge incontinence Large amount of urine with each occurrence
c. Functional incontinence Urine loss results from abnormal detrusor contractions
d. Overflow incontinence Constant dribbling of urine
e. Reflex incontinence Leakage of urine without lower urinary tract disorder

ANS: A, B, D
Stress incontinence is a loss of urine with physical exertion, coughing, sneezing, or exercising. Urge incontinence presents with an abrupt and strong urge to void and usually has a large amount of urine released with each occurrence. Overflow incontinence occurs with bladder distention and results in a constant dribbling of urine. Functional incontinence is the leakage of urine caused by factors other than a disorder of the lower urinary tract. Reflex incontinence results from abnormal detrusor contractions from a neurologic abnormality.

DIF: Remembering/Knowledge REF: 1351
KEY: Urinary incontinence
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

6. A nurse teaches a client with a history of calcium phosphate urinary stones. Which statements should the nurse include in this clients dietary teaching? (Select all that apply.)
a. Limit your intake of food high in animal protein.
b. Read food labels to help minimize your sodium intake.
c. Avoid spinach, black tea, and rhubarb.
d. Drink white wine or beer instead of red wine.
e. Reduce your intake of milk and other dairy products.

ANS: A, B, E
Clients with calcium phosphate urinary stones should be taught to limit the intake of foods high in animal protein, sodium, and calcium. Clients with calcium oxalate stones should avoid spinach, black tea, and rhubarb. Clients with uric acid stones should avoid red wine.

DIF: Applying/Application REF: 1365

KEY: Urolithiasis| nutritional requirements
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A nurse teaches a client about self-care after experiencing a urinary calculus treated by lithotripsy. Which statements should the nurse include in this clients discharge teaching? (Select all that apply.)
a. Finish the prescribed antibiotic even if you are feeling better.
b. Drink at least 3 liters of fluid each day.
c. The bruising on your back may take several weeks to resolve.
d. Report any blood present in your urine.
e. It is normal to experience pain and difficulty urinating.

ANS: A, B, C
The client should be taught to finish the prescribed antibiotic to ensure that he or she does not get a urinary tract infection. The client should drink at least 3 liters of fluid daily to dilute potential stone-forming crystals, prevent dehydration, and promote urine flow. After lithotripsy, the client should expect bruising that may take several weeks to resolve. The client should also experience blood in the urine for several days. The client should report any pain, fever, chills, or difficulty with urination to the provider as these may signal the beginning of an infection or the formation of another stone.

DIF: Applying/Application REF: 1365
KEY: Urolithiasis| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A nurse teaches a female client who has stress incontinence. Which statements should the nurse include about pelvic muscle exercises? (Select all that apply.)
a. When you start and stop your urine stream, you are using your pelvic muscles.
b. Tighten your pelvic muscles for a slow count of 10 and then relax for a slow count of 10.
c. Pelvic muscle exercises should only be performed sitting upright with your feet on the floor.
d. After you have been doing these exercises for a couple days, your control of urine will improve.
e. Like any other muscle in your body, you can make your pelvic muscles stronger by contracting them.

ANS: A, B, E
The client should be taught that the muscles used to start and stop urination are pelvic muscles, and that pelvic muscles can be strengthened by contracting and relaxing them. The client should tighten pelvic muscles for a slow count of 10 and then relax the muscles for a slow count of 10, and perform this exercise 15 times while in lying-down, sitting-up, and standing positions. The client should begin to notice improvement in control of urine after several weeks of exercising the pelvic muscles.

DIF: Understanding/Comprehension REF: 1354
KEY: Urinary incontinence| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

Chapter 67: Care of Patients with Kidney Disorders

MULTIPLE CHOICE

1. A nurse assesses a client with polycystic kidney disease (PKD). Which assessment finding should alert the nurse to immediately contact the health care provider?
a. Flank pain
b. Periorbital edema
c. Bloody and cloudy urine
d. Enlarged abdomen

ANS: B
Periorbital edema would not be a finding related to PKD and should be investigated further. Flank pain and a distended or enlarged abdomen occur in PKD because the kidneys enlarge and displace other organs. Urine can be bloody or cloudy as a result of cyst rupture or infection.

DIF: Applying/Application REF: 1374
KEY: Polycystic kidney disease
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse cares for a client with autosomal dominant polycystic kidney disease (ADPKD). The client asks, Will my children develop this disease? How should the nurse respond?
a. No genetic link is known, so your children are not at increased risk.
b. Your sons will develop this disease because it has a sex-linked gene.
c. Only if both you and your spouse are carriers of this disease.
d. Each of your children has a 50% risk of having ADPKD.

ANS: D
Children whose parent has the autosomal dominant form of PKD have a 50% chance of inheriting the gene that causes the disease. ADPKD is transmitted as an autosomal dominant trait and therefore is not gender specific. Both parents do not need to have this disorder.

DIF: Understanding/Comprehension REF: 1374
KEY: Polycystic kidney disease| genetics MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. After teaching a client with early polycystic kidney disease (PKD) about nutritional therapy, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?
a. I will take a laxative every night before going to bed.
b. I must increase my intake of dietary fiber and fluids.
c. I shall only use salt when I am cooking my own food.
d. Ill eat white bread to minimize gastrointestinal gas.

ANS: B
Clients with PKD often have constipation, which can be managed with increased fiber, exercise, and drinking plenty of water. Laxatives should be used cautiously. Clients with PKD should be on a restricted salt diet, which includes not cooking with salt. White bread has a low fiber count and would not be included in a high-fiber diet.

DIF: Applying/Application REF: 1375
KEY: Polycystic kidney disease| nutritional requirements
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

4. A nurse cares for a middle-aged female client with diabetes mellitus who is being treated for the third episode of acute pyelonephritis in the past year. The client asks, What can I do to help prevent these infections? How should the nurse respond?

a. Test your urine daily for the presence of ketone bodies and proteins.
b. Use tampons rather than sanitary napkins during your menstrual period.
c. Drink more water and empty your bladder more frequently during the day.
d. Keep your hemoglobin A1c under 9% by keeping your blood sugar controlled.

ANS: C
Clients with long-standing diabetes mellitus are at risk for pyelonephritis for many reasons. Chronically elevated blood glucose levels spill glucose into the urine, changing the pH and providing a favorable climate for bacterial growth. The neuropathy associated with diabetes reduces bladder tone and reduces the clients sensation of bladder fullness. Thus, even with large amounts of urine, the client voids less frequently, allowing stasis and overgrowth of microorganisms. Increasing fluid intake (specifically water) and voiding frequently prevent stasis and bacterial overgrowth. Testing urine and using tampons will not help prevent pyelonephritis. A hemoglobin A1c of 9% is too high.

DIF: Applying/Application REF: 1377
KEY: Diabetes mellitus| pyelonephritis MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse evaluates a client with acute glomerulonephritis (GN). Which manifestation should the nurse recognize as a positive response to the prescribed treatment?
a. The client has lost 11 pounds in the past 10 days.
b. The clients urine specific gravity is 1.048.
c. No blood is observed in the clients urine.
d. The clients blood pressure is 152/88 mm Hg.

ANS: A
Fluid retention is a major feature of acute GN. This weight loss represents fluid loss, indicating that the glomeruli are performing the function of filtration. A urine specific gravity of 1.048 is high. Blood is not usually seen in GN, so this finding would be expected. A blood pressure of 152/88 mm Hg is too high; this may indicate kidney damage or fluid overload.

DIF: Applying/Application REF: 1380
KEY: Glomerulonephritis
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. After teaching a client with nephrotic syndrome and a normal glomerular filtration, the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the nutritional therapy for this condition?
a. I must decrease my intake of fat.
b. I will increase my intake of protein.
c. A decreased intake of carbohydrates will be required.
d. An increased intake of vitamin C is necessary.

ANS: B
In nephrotic syndrome, the renal loss of protein is significant, leading to hypoalbuminemia and edema formation. If glomerular filtration is normal or near normal, increased protein loss should be matched by increased intake of protein. The client would not need to adjust fat, carbohydrates, or vitamins based on this disorder.

DIF: Applying/Application REF: 1382
KEY: Nephrotic syndrome| nutritional requirements
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

7. A nurse assesses a client who is recovering from a radical nephrectomy for renal cell carcinoma. The nurse notes that the clients blood pressure has decreased from 134/90 to 100/56 mm Hg and urine output is 20 mL for this past hour. Which action should the nurse take?
a. Position the client to lay on the surgical incision.

b. Measure the specific gravity of the clients urine.
c. Administer intravenous pain medications.
d. Assess the rate and quality of the clients pulse.

ANS: D
The nurse should first fully assess the client for signs of volume depletion and shock, and then notify the provider. The radical nature of the surgery and the proximity of the surgery to the adrenal gland put the client at risk for hemorrhage and adrenal insufficiency. Hypotension is a clinical manifestation associated with both hemorrhage and adrenal insufficiency. Hypotension is particularly dangerous for the remaining kidney, which must receive adequate perfusion to function effectively. Re-positioning the client, measuring specific gravity, and administering pain medication would not provide data necessary to make an appropriate clinical decision, nor are they appropriate interventions at this time.

DIF: Applying/Application REF: 1386
KEY: Renal cancer| postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

8. An emergency department nurse assesses a client with kidney trauma and notes that the clients abdomen is tender and distended and blood is visible at the urinary meatus. Which prescription should the nurse consult the provider about before implementation?
a. Assessing vital signs every 15 minutes
b. Inserting an indwelling urinary catheter
c. Administering intravenous fluids at 125 mL/hr
d. Typing and crossmatching for blood products

ANS: B
Clients with blood at the urinary meatus should not have a urinary catheter inserted via the urethra before additional diagnostic studies are done. The urethra could be torn. The nurse should question the provider about the need for a catheter; if one is needed, the provider can insert a suprapubic catheter. The nurse should monitor the clients vital signs closely, send blood for type and crossmatch in case the client needs blood products, and administer intravenous fluids.

DIF: Applying/Application REF: 1387
KEY: Trauma| emergency nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. After teaching a client with hypertension secondary to renal disease, the nurse assesses the clients understanding. Which statement made by the client indicates a need for additional teaching?
a. I can prevent more damage to my kidneys by managing my blood pressure.
b. If I have increased urination at night, I need to drink less fluid during the day.
c. I need to see the registered dietitian to discuss limiting my protein intake.
d. It is important that I take my antihypertensive medications as directed.

ANS: B
The client should not restrict fluids during the day due to increased urination at night. Clients with renal disease may be prescribed fluid restrictions. These clients should be assessed thoroughly for potential dehydration. Increased nocturnal voiding can be decreased by consuming fluids earlier in the day. Blood pressure control is needed to slow the progression of renal dysfunction. When dietary protein is restricted, refer the client to the registered dietitian as needed.

DIF: Applying/Application REF: 1383
KEY: Hypertension| hydration MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

10. A nurse cares for a client who is recovering after a nephrostomy tube was placed 6 hours ago. The nurse notes drainage in the tube has decreased from 40 mL/hr to 12 mL over the last hour. Which action should the nurse take?

a. Document the finding in the clients record.
b. Evaluate the tube as working in the hand-off report.
c. Clamp the tube in preparation for removing it.
d. Assess the clients abdomen and vital signs.

ANS: D
The nephrostomy tube should continue to have a consistent amount of drainage. If the drainage slows or stops, it may be obstructed. The nurse must notify the provider, but first should carefully assess the clients abdomen for pain and distention and check vital signs so that this information can be reported as well. The other interventions are not appropriate.

DIF: Applying/Application REF: 1377
KEY: Postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. A nurse teaches a client who is recovering from a nephrectomy secondary to kidney trauma. Which statement should the nurse include in this clients teaching?
a. Since you only have one kidney, a salt and fluid restriction is required.
b. Your therapy will include hemodialysis while you recover.
c. Medication will be prescribed to control your high blood pressure.
d. You need to avoid participating in contact sports like football.

ANS: D
Clients with one kidney need to avoid contact sports because the kidneys are easily injured. The client will not be required to restrict salt and fluids, end up on dialysis, or have new hypertension because of the nephrectomy.

DIF: Applying/Application REF: 1386
KEY: Trauma
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

12. A nurse provides health screening for a community health center with a large population of African-American clients. Which priority assessment should the nurse include when working with this population?
a. Measure height and weight.
b. Assess blood pressure.
c. Observe for any signs of abuse.
d. Ask about medications.

ANS: B
All interventions are important for the visiting nurse to accomplish. However, African Americans have a high rate of hypertension leading to end-stage renal disease. Each encounter that the nurse has with an African-American client provides a chance to detect hypertension and treat it. If the client is already on antihypertensive medication, assessing blood pressure monitors therapy.

DIF: Applying/Application REF: 1383
KEY: Hypertension| health screening
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

13. After teaching a client with renal cancer who is prescribed temsirolimus (Torisel), the nurse assesses the clients understanding. Which statement made by the client indicates a correct understanding of the teaching?
a. I will take this medication with food and plenty of water.
b. I shall keep my appointment at the infusion center each week.
c. Ill limit my intake of green leafy vegetables while on this medication.
d. I must not take this medication if I have an infection or am feeling ill.

ANS: B

Temsirolimus is administered as a weekly intravenous infusion. This medication blocks protein that is needed for cell division and therefore inhibits cell cycle progression. This medication is not taken orally, and clients do not need to follow a specific diet.

DIF: Applying/Application REF: 1385
KEY: Medication safety
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

14. A nurse cares for a client who has pyelonephritis. The client states, I am embarrassed to talk about my symptoms. How should the nurse respond?
a. I am a professional. Your symptoms will be kept in confidence.
b. I understand. Elimination is a private topic and shouldnt be discussed.
c. Take your time. It is okay to use words that are familiar to you.
d. You seem anxious. Would you like a nurse of the same gender to care for you?

ANS: C
Clients may be uncomfortable discussing issues related to elimination and the genitourinary area. The nurse should encourage the client to use language that is familiar to the client. The nurse should not make promises that cannot be kept, like keeping the clients symptoms confidential. The nurse must assess the client and cannot take the time to stop the discussion or find another nurse to complete the assessment.

DIF: Applying/Application REF: 1378
KEY: Psychosocial response MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychological Integrity

MULTIPLE RESPONSE

1. A nurse assesses a client who has a family history of polycystic kidney disease (PKD). For which clinical manifestations should the nurse assess? (Select all that apply.)
a. Nocturia
b. Flank pain
c. Increased abdominal girth
d. Dysuria
e. Hematuria
f. Diarrhea

ANS: B, C, E
Clients with PKD experience abdominal distention that manifests as flank pain and increased abdominal girth. Bloody urine is also present with tissue damage secondary to PKD. Clients with PKD often experience constipation, but would not report nocturia or dysuria.

DIF: Remembering/Knowledge REF: 1374
KEY: Polycystic kidney disease| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse assesses a client with nephrotic syndrome. For which clinical manifestations should the nurse assess? (Select all that apply.)
a. Proteinuria
b. Hypoalbuminemia
c. Dehydration
d. Lipiduria
e. Dysuria
f. Costovertebral angle (CVA) tenderness

ANS: A, B, D
Nephrotic syndrome is caused by glomerular damage and is characterized by proteinuria (protein level higher than 3.5 g/24 hr), hypoalbuminemia, edema, and lipiduria. Fluid overload leading to edema and hypertension is

common with nephrotic syndrome; dehydration does not occur. Dysuria is present with cystitis. CVA tenderness is present with inflammatory changes in the kidney.

DIF: Remembering/Knowledge REF: 1382
KEY: Nephrotic syndrome| assessment/diagnostic examination
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A nurse reviews laboratory results for a client with glomerulonephritis. The clients glomerular filtration rate (GFR) is 40 mL/min as measured by a 24-hour creatinine clearance. How should the nurse interpret this finding? (Select all that apply.)
a. Excessive GFR
b. Normal GFR
c. Reduced GFR
d. Potential for fluid overload
e. Potential for dehydration

ANS: C, D
The GFR refers to the initial amount of urine that the kidneys filter from the blood. In the healthy adult, the normal GFR ranges between 100 and 120 mL/min, most of which is reabsorbed in the kidney tubules. A GFR of 40 mL/min is drastically reduced, with the client experiencing fluid retention and risks for hypertension and pulmonary edema as a result of excess vascular fluid.

DIF: Applying/Application REF: 1382
KEY: Glomerulonephritis| hydration
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A nurse assesses a client who is recovering from a nephrostomy. Which assessment findings should alert the nurse to urgently contact the health care provider? (Select all that apply.)
a. Clear drainage
b. Bloody drainage at site
c. Client reports headache
d. Foul-smelling drainage
e. Urine draining from site

ANS: B, D, E
After a nephrostomy, the nurse should assess the client for complications and urgently notify the provider if drainage decreases or stops, drainage is cloudy or foul-smelling, the nephrostomy sites leaks blood or urine, or the client has back pain. Clear drainage is normal. A headache would be an unrelated finding.

DIF: Applying/Application REF: 1377
KEY: Postoperative nursing
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

5. A nurse teaches a client with polycystic kidney disease (PKD). Which statements should the nurse include in this clients discharge teaching? (Select all that apply.)
a. Take your blood pressure every morning.
b. Weigh yourself at the same time each day.
c. Adjust your diet to prevent diarrhea.
d. Contact your provider if you have visual disturbances.
e. Assess your urine for renal stones.

ANS: A, B, D
A client who has PKD should measure and record his or her blood pressure and weight daily, limit salt intake, and adjust dietary selections to prevent constipation. The client should notify the provider if urine smells foul or has blood in it, as these are signs of a urinary tract infection or glomerular injury. The client should also notify the provider if visual disturbances are experienced, as this is a sign of a possible berry aneurysm, which

is a complication of PKD. Diarrhea and renal stones are not manifestations or complications of PKD; therefore, teaching related to these concepts would be inappropriate.

DIF: Applying/Application REF: 1375
KEY: Polycystic kidney disease MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

SHORT ANSWER

1. An emergency department nurse cares for a client who is severely dehydrated and is prescribed 3 L of intravenous fluid over 6 hours. At what rate (mL/hr) should the nurse set the intravenous pump to infuse the fluids? (Record your answer using a whole number.) ____ mL/hr

ANS:
500 mL/hr
Because IV pumps deliver in units of milliliters per hour, the pump would have to be set at 500 mL/hr to deliver 3 L (3000 mL) over 6 hours.

$6x = 3000$
$x = 500$

DIF: Applying/Application REF: 1388
KEY: Hydration| medication safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 68: Care of Patients with Acute Kidney Injury and Chronic Kidney Disease

MULTIPLE CHOICE

1. The nurse is assessing a client with a diagnosis of pre-renal acute kidney injury (AKI). Which condition would the nurse expect to find in the clients recent history?
a. Pyelonephritis
b. Myocardial infarction
c. Bladder cancer
d. Kidney stones

ANS: B
Pre-renal causes of AKI are related to a decrease in perfusion, such as with a myocardial infarction. Pyelonephritis is an intrinsic or intrarenal cause of AKI related to kidney damage. Bladder cancer and kidney stones are post-renal causes of AKI related to urine flow obstruction.

DIF: Understanding/Comprehension REF: 1391
KEY: Renal system| pathophysiology| nursing analysis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A marathon runner comes into the clinic and states I have not urinated very much in the last few days. The nurse notes a heart rate of 110 beats/min and a blood pressure of 86/58 mm Hg. Which action by the nurse is the priority?
a. Give the client a bottle of water immediately.
b. Start an intravenous line for fluids.
c. Teach the client to drink 2 to 3 liters of water daily.
d. Perform an electrocardiogram.

ANS: A
This athlete is mildly dehydrated as evidenced by the higher heart rate and lower blood pressure. The nurse can start hydrating the client with a bottle of water first, followed by teaching the client to drink 2 to 3 liters of water each day. An intravenous line may be ordered later, after the clients degree of dehydration is assessed. An electrocardiogram is not necessary at this time.

DIF: Applying/Application REF: 1393
KEY: Renal system| dehydration| nursing interventions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A male client comes into the emergency department with a serum creatinine of 2.2 mg/dL and a blood urea nitrogen (BUN) of 24 mL/dL. What question should the nurse ask first when taking this clients history?
a. Have you been taking any aspirin, ibuprofen, or naproxen recently?
b. Do you have anyone in your family with renal failure?
c. Have you had a diet that is low in protein recently?
d. Has a relative had a kidney transplant lately?

ANS: A
There are some medications that are nephrotoxic, such as the nonsteroidal anti-inflammatory drugs ibuprofen, aspirin, and naproxen. This would be a good question to initially ask the client since both the serum creatinine and BUN are elevated, indicating some renal problems. A family history of renal failure and kidney transplantation would not be part of the questioning and could cause anxiety in the client. A diet high in protein could be a factor in an increased BUN.

DIF: Applying/Application REF: 1392
KEY: Renal system| medications| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A client is admitted with acute kidney injury (AKI) and a urine output of 2000 mL/day. What is the major concern of the nurse regarding this clients care?
a. Edema and pain
b. Electrolyte and fluid imbalance
c. Cardiac and respiratory status
d. Mental health status

ANS: B
This client may have an inflammatory cause of AKI with proteins entering the glomerulus and holding the fluid in the filtrate, causing polyuria. Electrolyte loss and fluid balance is essential. Edema and pain are not usually a problem with fluid loss. There could be changes in the clients cardiac, respiratory, and mental health status if the electrolyte imbalance is not treated.

DIF: Applying/Application REF: 1395
KEY: Renal system| pathophysiology| dehydration
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A client with acute kidney injury has a blood pressure of 76/55 mm Hg. The health care provider ordered 1000 mL of normal saline to be infused over 1 hour to maintain perfusion. The client is starting to develop shortness of breath. What is the nurses priority action?
a. Calculate the mean arterial pressure (MAP).
b. Ask for insertion of a pulmonary artery catheter.
c. Take the clients pulse.
d. Slow down the normal saline infusion.

ANS: D
The nurse should assess that the client could be developing fluid overload and respiratory distress and slow down the normal saline infusion. The calculation of the MAP also reflects perfusion. The insertion of a pulmonary artery catheter would evaluate the clients hemodynamic status, but this should not be the initial action by the nurse. Vital signs are also important after adjusting the intravenous infusion.

DIF: Applying/Application REF: 1395
KEY: Renal system| hemodynamic status| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A client has a serum potassium level of 6.5 mmol/L, a serum creatinine level of 2 mg/dL, and a urine output of 350 mL/day. What is the best action by the nurse?
a. Place the client on a cardiac monitor immediately.
b. Teach the client to limit high-potassium foods.
c. Continue to monitor the clients intake and output.
d. Ask to have the laboratory redraw the blood specimen.

ANS: A
The priority action by the nurse should be to check the cardiac status with a monitor. High potassium levels can lead to dysrhythmias. The other choices are logical nursing interventions for acute kidney injury but not the best immediate action.

DIF: Applying/Application REF: 1400
KEY: Renal system| electrolyte imbalance| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. A client has just had a central line catheter placed that is specific for hemodialysis. What is the most appropriate action by the nurse?
a. Use the catheter for the next laboratory blood draw.

b. Monitor the central venous pressure through this line.
c. Access the line for the next intravenous medication.
d. Place a heparin or heparin/saline dwell after hemodialysis.

ANS: D
The central line should have a heparin or heparin/saline dwell after hemodialysis treatment. The central line catheter used for dialysis should not be used for blood sampling, monitoring central venous pressures, or giving drugs or fluids.

DIF: Remembering/Knowledge REF: 1414
KEY: Renal system| vascular access device| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. A client in the intensive care unit is started on continuous venovenous hemofiltration (CVVH). Which finding is the cause of immediate action by the nurse?
a. Blood pressure of 76/58 mm Hg
b. Sodium level of 138 mEq/L
c. Potassium level of 5.5 mEq/L
d. Pulse rate of 90 beats/min

ANS: A
Hypotension can be a problem with CVVH if replacement fluid does not provide enough volume to maintain blood pressure. The specially trained nurse needs to monitor for ongoing fluid and electrolyte replacement. The sodium level is normal and the potassium level is slightly elevated, which could be normal findings for someone with acute kidney injury. A pulse rate of 90 beats/min is normal.

DIF: Applying/Application REF: 1397
KEY: Renal system| dialysis| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

9. The nurse is caring for four clients with chronic kidney disease. Which client should the nurse assess first upon initial rounding?
a. Woman with a blood pressure of 158/90 mm Hg
b. Client with Kussmaul respirations
c. Man with skin itching from head to toe
d. Client with halitosis and stomatitis

ANS: B
Kussmaul respirations indicate a worsening of chronic kidney disease (CKD). The client is increasing the rate and depth of breathing to excrete carbon dioxide through the lungs. Hypertension is common in most clients with CKD, and skin itching increases with calcium-phosphate imbalances, another common finding in CKD. Uremia from CKD causes ammonia to be formed, resulting in the common findings of halitosis and stomatitis.

DIF: Applying/Application REF: 1399
KEY: Renal system| nursing assessment| respiratory system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

10. The charge nurse of the medical-surgical unit is making staff assignments. Which staff member should be assigned to a client with chronic kidney disease who is exhibiting a low-grade fever and a pericardial friction rub?
a. Registered nurse who just floated from the surgical unit
b. Registered nurse who just floated from the dialysis unit
c. Registered nurse who was assigned the same client yesterday
d. Licensed practical nurse with 5 years experience on this floor

ANS: C

The client is exhibiting symptoms of pericarditis, which can occur with chronic kidney disease. Continuity of care is important to assess subtle differences in clients. Therefore, the registered nurse (RN) who was assigned to this client previously should again give care to this client. The float nurses would not be as knowledgeable about the unit and its clients. The licensed practical nurse may not have the education level of the RN to assess for pericarditis.

DIF: Applying/Application REF: 1400
KEY: Renal system| supervision-assignment| patient-centered care
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

11. A male client with chronic kidney disease (CKD) is refusing to take his medication and has missed two hemodialysis appointments. What is the best initial action for the nurse?
a. Discuss what the treatment regimen means to him.
b. Refer the client to a mental health nurse practitioner.
c. Reschedule the appointments to another date and time.
d. Discuss the option of peritoneal dialysis.

ANS: A
The initial action for the nurse is to assess anxiety, coping styles, and the clients acceptance of the required treatment for CKD. The client may be in denial of the diagnosis. While rescheduling hemodialysis appointments may help, and referral to a mental health practitioner and the possibility of peritoneal dialysis are all viable options, assessment of the clients acceptance of the treatment should come first.

DIF: Applying/Application REF: 1401
KEY: Renal system| patient-centered care| coping
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

12. A client is taking furosemide (Lasix) 40 mg/day for management of chronic kidney disease (CKD). To detect the positive effect of the medication, what action of the nurse is best?
a. Obtain daily weights of the client.
b. Auscultate heart and breath sounds.
c. Palpate the clients abdomen.
d. Assess the clients diet history.

ANS: A
Furosemide (Lasix) is a loop diuretic that helps reduce fluid overload and hypertension in clients with early stages of CKD. One kilogram of weight equals about 1 liter of fluid retained in the client, so daily weights are necessary to monitor the response of the client to the medication. Heart and breath sounds should be assessed if there is fluid retention, as in heart failure. Palpation of the clients abdomen is not necessary, but the nurse should check for edema. The diet history of the client would be helpful to assess electrolyte replacement since potassium is lost with this diuretic, but this does not assess the effect of the medication.

DIF: Applying/Application REF: 1405
KEY: Renal system| diuretics| nursing interventions
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

13. A client is diagnosed with chronic kidney disease (CKD). What is an ideal goal of treatment set by the nurse in the care plan to reduce the risk of pulmonary edema?
a. Maintaining oxygen saturation of 89%
b. Minimal crackles and wheezes in lung sounds
c. Maintaining a balanced intake and output
d. Limited shortness of breath upon exertion

ANS: C
With an optimal fluid balance, the client will be more able to eject blood from the left ventricle without increased pressure in the left ventricle and pulmonary vessels. Other ideal goals are oxygen saturations greater

than 92%, no auscultated crackles or wheezes, and no demonstrated shortness of breath.

DIF: Applying/Application REF: 1403
KEY: Renal system| pulmonary edema| nursing goal
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A client has a long history of hypertension. Which category of medications would the nurse expect to be ordered to avoid chronic kidney disease (CKD)?
a. Antibiotic
b. Histamine blocker
c. Bronchodilator
d. Angiotensin-converting enzyme (ACE) inhibitor

ANS: D
ACE inhibitors stop the conversion of angiotensin I to the vasoconstrictor angiotensin II. This category of medication also blocks bradykinin and prostaglandin, increases renin, and decreases aldosterone, which promotes vasodilation and perfusion to the kidney. Antibiotics fight infection, histamine blockers decrease inflammation, and bronchodilators increase the size of the bronchi; none of these medications helps slow the progression of CKD in clients with hypertension.

DIF: Applying/Application REF: 1406
KEY: Renal system| hypertension| medications| angiotensin-converting enzyme (ACE) inhibitors MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. A 70-kg adult with chronic renal failure is on a 40-g protein diet. The client has a reduced glomerular filtration rate and is not undergoing dialysis. Which result would give the nurse the most concern?
a. Albumin level of 2.5 g/dL
b. Phosphorus level of 5 mg/dL
c. Sodium level of 135 mmol/L
d. Potassium level of 5.5 mmol/L

ANS: A
Protein restriction is necessary with chronic renal failure due to the buildup of waste products from protein breakdown. The nurse would be concerned with the low albumin level since this indicates that the protein in the diet is not enough for the clients metabolic needs. The electrolyte values are not related to the protein-restricted diet.

DIF: Applying/Application REF: 1406
KEY: Renal system| nutrition| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

16. The nurse is teaching a client with chronic kidney disease (CKD) about the sodium restriction needed in the diet to prevent edema and hypertension. Which statement by the client indicates more teaching is needed?
a. I am thrilled that I can continue to eat fast food.
b. I will cut out bacon with my eggs every morning.
c. My cooking style will change by not adding salt.
d. I will probably lose weight by cutting out potato chips.

ANS: A
Fast food restaurants usually serve food that is high in sodium. This statement indicates that more teaching needs to occur. The other statements show a correct understanding of the teaching.

DIF: Remembering/Knowledge REF: 1407
KEY: Renal system| nutrition| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

17. A client is placed on fluid restrictions because of chronic kidney disease (CKD). Which assessment finding would alert the nurse that the clients fluid balance is stable at this time?
a. Decreased calcium levels
b. Increased phosphorus levels
c. No adventitious sounds in the lungs
d. Increased edema in the legs

ANS: C
The absence of adventitious sounds upon auscultation of the lungs indicates a lack of fluid overload and fluid balance in the clients body. Decreased calcium levels and increased phosphorus levels are common findings with CKD. Edema would indicate a fluid imbalance.

DIF: Applying/Application REF: 1405
KEY: Renal system| fluid and electrolyte imbalance| nursing analysis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

18. A client with chronic kidney disease (CKD) is experiencing nausea, vomiting, visual changes, and anorexia. Which action by the nurse is best?
a. Check the clients digoxin (Lanoxin) level.
b. Administer an anti-nausea medication.
c. Ask if the client is able to eat crackers.
d. Get a referral to a gastrointestinal provider.

ANS: A
These signs and symptoms are indications of digoxin (Lanoxin) toxicity. The nurse should check the level of this medication. Administering antiemetics, asking if the client can eat, and obtaining a referral to a specialist all address the clients symptoms but do not lead to the cause of the symptoms.

DIF: Applying/Application REF: 1407
KEY: Renal system| medications| digoxin
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

19. The nurse is taking the vital signs of a client after hemodialysis. Blood pressure is 110/58 mm Hg, pulse 66 beats/min, and temperature is 99.8 F (37.6 C). What is the most appropriate action by the nurse?
a. Administer fluid to increase blood pressure.
b. Check the white blood cell count.
c. Monitor the clients temperature.
d. Connect the client to an electrocardiographic (ECG) monitor.

ANS: C
During hemodialysis, the dialysate is warmed to increase diffusion and prevent hypothermia. The clients temperature could reflect the temperature of the dialysate. There is no indication to check the white blood cell count or connect the client to an ECG monitor. The other vital signs are within normal limits.

DIF: Applying/Application REF: 1411
KEY: Renal system| dialysis| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

20. The nurse is teaching the main principles of hemodialysis to a client with chronic kidney disease. Which statement by the client indicates a need for further teaching by the nurse?
a. My sodium level changes by movement from the blood into the dialysate.
b. Dialysis works by movement of wastes from lower to higher concentration.
c. Extra fluid can be pulled from the blood by osmosis.
d. The dialysate is similar to blood but without any toxins.

ANS: B

Dialysis works using the passive transfer of toxins by diffusion. Diffusion is the movement of molecules from an area of higher concentration to an area of lower concentration. The other statements show a correct understanding about hemodialysis.

DIF: Remembering/Knowledge REF: 1411
KEY: Renal system| dialysis| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

21. The charge nurse is orienting a float nurse to an assigned client with an arteriovenous (AV) fistula for hemodialysis in her left arm. Which action by the float nurse would be considered unsafe?
a. Palpating the access site for a bruit or thrill
b. Using the right arm for a blood pressure reading
c. Administering intravenous fluids through the AV fistula
d. Checking distal pulses in the left arm

ANS: C
The nurse should not use the arm with the AV fistula for intravenous infusion, blood pressure readings, or venipuncture. Compression and infection can result in the loss of the AV fistula. The AV fistula should be monitored by auscultating or palpating the access site. Checking the distal pulse would be an appropriate assessment.

DIF: Applying/Application REF: 1412
KEY: Renal system| patient safety| injury prevention| dialysis
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

22. A client is assessed by the nurse after a hemodialysis session. The nurse notes bleeding from the clients nose and around the intravenous catheter. What action by the nurse is the priority?
a. Hold pressure over the clients nose for 10 minutes.
b. Take the clients pulse, blood pressure, and temperature.
c. Assess for a bruit or thrill over the arteriovenous fistula.
d. Prepare protamine sulfate for administration.

ANS: D
Heparin is used with hemodialysis treatments. The bleeding alerts the nurse that too much anticoagulant is in the clients system and protamine sulfate should be administered. Pressure, taking vital signs, and assessing for a bruit or thrill are not as important as medication administration.

DIF: Applying/Application REF: 1412
KEY: Renal system| patient safety| heparin
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

23. A nurse is caring for a client who is scheduled for a dose of cefazolin and vitamins at this time. Hemodialysis for this client is also scheduled in 60 minutes. Which action by the nurse is best?
a. Administer cefazolin since the level of the antibiotic must be maintained.
b. Hold the vitamins but administer the cefazolin.
c. Hold the cefazolin but administer the vitamins.
d. Hold all medications since both cefazolin and vitamins are dialyzable.

ANS: D
Both the cefazolin and the vitamins should be held until after the hemodialysis is completed because they would otherwise be removed by the dialysis process.

DIF: Applying/Application REF: 1415
KEY: Renal system| dialysis| medications| antibiotics
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

24. A client is having a peritoneal dialysis treatment. The nurse notes an opaque color to the effluent. What is the priority action by the nurse?
a. Warm the dialysate solution in a microwave before instillation.
b. Take a sample of the effluent and send to the laboratory.
c. Flush the tubing with normal saline to maintain patency of the catheter.
d. Check the peritoneal catheter for kinking and curling.

ANS: B
An opaque or cloudy effluent is the first sign of peritonitis. A sample of the effluent would need to be sent to the laboratory for culture and sensitivity in order to administer the correct antibiotic. Warming the dialysate in a microwave and flushing the tubing are not safe actions by the nurse. Checking the catheter for obstruction is a viable option but will not treat the peritonitis.

DIF: Applying/Application REF: 1419
KEY: Renal system| dialysis| infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

25. The nurse is teaching a client how to increase the flow of dialysate into the peritoneal cavity during dialysis. Which statement by the client demonstrates a correct understanding of the teaching?
a. I should leave the drainage bag above the level of my abdomen.
b. I could flush the tubing with normal saline if the flow stops.
c. I should take a stool softener every morning to avoid constipation.
d. My diet should have low fiber in it to prevent any irritation.

ANS: C
Inflow and outflow problems of the dialysate are best controlled by preventing constipation. A daily stool softener is the best option for the client. The drainage bag should be below the level of the abdomen. Flushing the tubing will not help with the flow. A diet high in fiber will also help with a constipation problem.

DIF: Applying/Application REF: 1420
KEY: Renal system| dialysis| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

26. A client with chronic kidney disease states, I feel chained to the hemodialysis machine. What is the nurses best response to the clients statement?
a. That feeling will gradually go away as you get used to the treatment.
b. You probably need to see a psychiatrist to see if you are depressed.
c. Do you need help from social services to discuss financial aid?
d. Tell me more about your feelings regarding hemodialysis treatment.

ANS: D
The nurse needs to explore the clients feelings in order to help the client cope and enter a phase of acceptance or resignation. It is common for clients to be discouraged because of the dependency of the treatment, especially during the first year. Referrals to a mental health provider or social services are possibilities, but only after exploring the clients feelings first. Telling the client his or her feelings will go away is dismissive of the clients concerns.

DIF: Applying/Application REF: 1415
KEY: Renal system| dialysis| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

27. A client is recovering from a kidney transplant. The clients urine output was 1500 mL over the last 12-hour period since transplantation. What is the priority assessment by the nurse?
a. Checking skin turgor
b. Taking blood pressure
c. Assessing lung sounds
d. Weighing the client

ANS: B
By taking blood pressure, the nurse is assessing for hypotension that could compromise perfusion to the new kidney. The nurse then should notify the provider immediately. Skin turgor, lung sounds, and weight could give information about the fluid status of the client, but they are not the priority assessment.

DIF: Applying/Application REF: 1422
KEY: Renal system| postoperative nursing| transplantation
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

28. A nurse reviews these laboratory values of a client who returned from kidney transplantation 12 hours ago:
Sodium 136 mEq/L
Potassium 5 mEq/L
Blood urea nitrogen (BUN) 44 mg/dL
Serum creatinine 2.5 mg/dL
What initial intervention would the nurse anticipate?
a. Start hemodialysis immediately.
b. Discuss the need for peritoneal dialysis.
c. Increase the dose of immunosuppression.
d. Return the client to surgery for exploration.

ANS: C
The client may need a higher dose of immunosuppressive medication as evidenced by the elevated BUN and serum creatinine levels. This increased dose may reverse the possible acute rejection of the transplanted kidney. The client does not need hemodialysis, peritoneal dialysis, or further surgery at this point.

DIF: Applying/Application REF: 1422
KEY: Renal system| transplantation| nursing analysis
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. The nurse is caring for five clients on the medical-surgical unit. Which clients would the nurse consider to be at risk for post-renal acute kidney injury (AKI)? (Select all that apply.)
a. Man with prostate cancer
b. Woman with blood clots in the urinary tract
c. Client with ureterolithiasis
d. Firefighter with severe burns
e. Young woman with lupus

ANS: A, B, C
Urine flow obstruction, such as prostate cancer, blood clots in the urinary tract, and kidney stones (ureterolithiasis), causes post-renal AKI. Severe burns would be a pre-renal cause. Lupus would be an intrarenal cause for AKI.

DIF: Understanding/Comprehension REF: 1392
KEY: Renal system| pathophysiology
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

2. A nurse is caring for a postoperative 70-kg client who had major blood loss during surgery. Which findings by the nurse should prompt immediate action to prevent acute kidney injury? (Select all that apply.)
a. Urine output of 100 mL in 4 hours
b. Urine output of 500 mL in 12 hours
c. Large amount of sediment in the urine
d. Amber, odorless urine
e. Blood pressure of 90/60 mm Hg

ANS: A, C, E
The low urine output, sediment, and blood pressure should be reported to the provider. Postoperatively, the nurse should measure intake and output, check the characteristics of the urine, and report sediment, hematuria, and urine output of less than 0.5 mL/kg/hour for 3 to 4 hours. A urine output of 100 mL is low, but a urine output of 500 mL in 12 hours should be within normal limits. Perfusion to the kidneys is compromised with low blood pressure. The amber odorless urine is normal.

DIF: Applying/Application REF: 1422
KEY: Renal system| nursing assessment| postoperative nursing
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A client is hospitalized in the oliguric phase of acute kidney injury (AKI) and is receiving tube feedings. The nurse is teaching the clients spouse about the kidney-specific formulation for the enteral solution compared to standard formulas. What components should be discussed in the teaching plan? (Select all that apply.)
a. Lower sodium
b. Higher calcium
c. Lower potassium
d. Higher phosphorus
e. Higher calories

ANS: A, C, E
Many clients with AKI are too ill to meet caloric goals and require tube feedings with kidney-specific formulas that are lower in sodium, potassium, and phosphorus, and higher in calories than are standard formulas.

DIF: Remembering/Knowledge REF: 1396
KEY: Renal system| nutritional requirements| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

4. The nurse is teaching a client with diabetes mellitus how to prevent or delay chronic kidney disease (CKD). Which client statements indicate a lack of understanding of the teaching? (Select all that apply.)
a. I need to decrease sodium, cholesterol, and protein in my diet.
b. My weight should be maintained at a body mass index of 30.
c. Smoking should be stopped as soon as I possibly can.
d. I can continue to take an aspirin every 4 to 8 hours for my pain.
e. I really only need to drink a couple of glasses of water each day.

ANS: B, D, E
Weight should be maintained at a body mass index (BMI) of 22 to 25. A BMI of 30 indicates obesity. The use of nonsteroidal anti-inflammatory drugs such as aspirin should be limited to the lowest time at the lowest dose due to interference with kidney blood flow. The client should drink at least 2 liters of water daily. Diet adjustments should be made by restricting sodium, cholesterol, and protein. Smoking causes constriction of blood vessels and decreases kidney perfusion, so the client should stop smoking.

DIF: Applying/Application REF: 1401
KEY: Renal system| lifestyle factors| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. A nurse is giving discharge instructions to a client recently diagnosed with chronic kidney disease (CKD). Which statements made by the client indicate a correct understanding of the teaching? (Select all that apply.)
a. I can continue to take antacids to relieve heartburn.
b. I need to ask for an antibiotic when scheduling a dental appointment.
c. Ill need to check my blood sugar often to prevent hypoglycemia.
d. The dose of my pain medication may have to be adjusted.
e. I should watch for bleeding when taking my anticoagulants.

ANS: B, C, D, E
In discharge teaching, the nurse must emphasize that the client needs to have an antibiotic prophylactically before dental procedures to prevent infection. There may be a need for dose reduction in medications if the kidney is not excreting them properly (antacids with magnesium, antibiotics, antidiabetic drugs, insulin, opioids, and anticoagulants).

DIF: Applying/Application REF: 1409
KEY: Renal system| patient education| medication safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

6. A client is undergoing hemodialysis. The clients blood pressure at the beginning of the procedure was 136/88 mm Hg, and now it is 110/54 mm Hg. What actions should the nurse perform to maintain blood pressure? (Select all that apply.)
a. Adjust the rate of extracorporeal blood flow.
b. Place the client in the Trendelenburg position.
c. Stop the hemodialysis treatment.
d. Administer a 250-mL bolus of normal saline.
e. Contact the health care provider for orders.

ANS: A, B, D
Hypotension occurs often during hemodialysis treatments as a result of vasodilation from the warmed dialysate. Modest decreases in blood pressure, as is the case with this client, can be maintained with rate adjustment, Trendelenburg positioning, and a fluid bolus. If the blood pressure drops considerably after two boluses and cooling dialysate, the hemodialysis can be stopped and the health care provider contacted.

DIF: Applying/Application REF: 1415
KEY: Renal system| dialysis| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

7. A client is unsure of the decision to undergo peritoneal dialysis (PD) and wishes to discuss the advantages of this treatment with the nurse. Which statements by the nurse are accurate regarding PD? (Select all that apply.)
a. You will not need vascular access to perform PD.
b. There is less restriction of protein and fluids.
c. You will have no risk for infection with PD.
d. You have flexible scheduling for the exchanges.
e. It takes less time than hemodialysis treatments.

ANS: A, B, D
PD is based on exchanges of waste, fluid, and electrolytes in the peritoneal cavity. There is no need for vascular access. Protein is lost in the exchange, which allows for more protein and fluid in the diet. There is flexibility in the time for exchanges, but the treatment takes a longer period of time compared to hemodialysis. There still is risk for infection with PD, especially peritonitis.

DIF: Remembering/Knowledge REF: 1410
KEY: Renal system| dialysis| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

SHORT ANSWER

1. A client in the intensive care unit with acute kidney injury (AKI) must maintain a mean arterial pressure (MAP) of 65 mm Hg to promote kidney perfusion. What is the clients MAP if the blood pressure is 98/50 mm Hg? (Record your answer using a whole number.) _____ mm Hg

ANS:
66 mm Hg

DIF: Applying/Application REF: 1395
KEY: Renal system| perfusion| mean arterial blood pressure| calculation
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

Chapter 69: Assessment of the Reproductive System

MULTIPLE CHOICE

1. The nurse is developing a teaching plan for a client who is scheduled for her first Papanicolaou test. What instruction by the nurse is the most accurate?
a. The timing of the Pap smear does not matter.
b. Sexual intercourse will not interfere with the results.
c. Results can be interpreted immediately in the office.
d. Results are best if you do not douche 24 hours before the test.

ANS: D
In order to prevent false interpretation, the client must not douche or have sexual intercourse for at least 24 hours before the Pap smear. Timing is important, with the test scheduled between the clients menstrual periods so that the menstrual flow does not interfere with laboratory analysis. The specimens are placed on a glass slide and sent to the laboratory for examination and cannot be interpreted immediately.

DIF: Understanding/Comprehension REF: 1433
KEY: Health promotion| cancer screening Pap smear
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. The nurse is assessing the reproductive history of a 68-year-old postmenopausal woman. Which finding is cause for immediate action by the nurse?
a. Vaginal dryness
b. Need for a Papanicolaou test if none for 3 years
c. Bleeding from the vagina
d. Leakage of urine

ANS: C
Vaginal bleeding is not normal for the postmenopausal woman. Vaginal dryness and leakage of urine are common findings in adults of this age range. Pap tests may not be needed for women over 65 who have had regular cervical cancer testing with normal results.

DIF: Applying/Application REF: 1432
KEY: Adult life stages| older adult| nursing assessment
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. The nurse is reviewing discharge instructions with a client who has just experienced an endometrial biopsy. Which finding should be reported to the health care provider immediately?
a. Mild cramping
b. Slight chills and fever
c. Spotting of blood on a perineal pad
d. Fatigue after anesthesia

ANS: B
Chills and fever could indicate an infection and should be reported immediately to the health care provider. Mild cramping, spotting, and fatigue are normal findings after an endometrial biopsy.

DIF: Applying/Application REF: 1437
KEY: Infection control| wound infection| discharge teaching
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

4. A client is concerned about her irregular menstrual periods since she has increased her daily workouts at the gym to 2 hours each day. What is the nurses best response?
a. Do you want to talk about the need for that much exercise?
b. Exercise is healthy but can decrease body fat and cause irregular periods.

c. Bingeing and purging can cause electrolyte problems in your body.
d. Anorexic behavior can result in decreased estrogen levels.

ANS: B
There needs to be a certain level of body fat and weight to maintain regular menstrual cycles. The client has only indicated that she has increased her workouts. There is no indication that she has anorexic or bingeing and purging behaviors.

DIF: Applying/Application REF: 1432
KEY: Exercise| health promotion| lifestyle choices
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

5. A nurse and unlicensed assistive personnel (UAP) are helping a client during a hysterosalpingogram. Which action by the nurse is best delegated to the UAP?
a. Witnessing of the consent form
b. Assisting the client into a lithotomy position
c. Asking about allergies to iodine or shellfish
d. Assessing for pelvic or shoulder pain after the study

ANS: B
The UAP would be able to position the client for the procedure. Only the nurse has the ability to witness the consent form and assess allergies and pain within the nursing scope of practice.

DIF: Applying/Application REF: 1435
KEY: Management| delegation| intraoperative nursing| unlicensed assistive personnel (UAP) MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. The mother of an 18-year-old girl asks the nurse which screening her daughter should receive now based on evidence-based recommendations. Which suggestion by the nurse is best?
a. Papanicolaou test
b. Human papilloma virus (HPV) test
c. Mammogram
d. No screenings at this time

ANS: D
Since the daughter is only 18, it is not recommended that she receive any of these screenings. Pap screenings are recommended to start at age 21. The HPV test can be done with the Pap test for women older than 30 or who had an abnormal Pap test result. A mammogram is recommended for women age 40 or older since cancers are more able to be distinguished from normal glandular tissue at that age.

DIF: Applying/Application REF: 1433
KEY: Health promotion| self-care| reproductive screenings
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

7. A client is scheduled for a laparoscopy to remove endometriosis tissue. Which response by the client alerts the nurse of the need for further teaching?
a. The surgeon told me that carbon dioxide would be infused into my pelvic cavity.
b. There will be one or more small incisions in order to visualize all of the organs.
c. There will be some shoulder pain after the procedure that may last 48 hours.
d. I can return to jogging my 3-mile routine in a few days.

ANS: D
No strenuous activity should occur for 7 days after the procedure. Carbon dioxide is infused into the pelvic cavity to visualize the organs. There are only one or more small incisions with this procedure. The referred shoulder pain that will occur should only last 48 hours.

DIF: Applying/Application REF: 1437
KEY: Health promotion| self-care| laparoscopy
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

8. A 67-year-old male client had some serum tests performed during his annual examination. The nurse reviews his results, as follows: testosterone: 680 ng/dL; prostate-specific antigen: 10 ng/mL; prolactin: 5 ng/mL. What action by the nurse is best?
a. Assess for possible galactorrhea with breast discharge.
b. Note the possibility of a testicular tumor.
c. Communicate to the provider that results were normal.
d. Prepare the client for further diagnostic testing.

ANS: D
The prostate-specific antigen is increased from the normal of 0 to 2.5, which could indicate benign prostatic hyperplasia or prostate cancer. Further testing would have to be done. The values of testosterone and prolactin are within normal range. If the prolactin were increased, there would be a possibility of galactorrhea. An increase in testosterone could indicate a possible testicular tumor.

DIF: Applying/Application REF: 1434
KEY: Older adult| health promotion| prostate cancer
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A 72-year-old woman is being assessed by the nurse for an annual physical. Which finding is of concern to the nurse?
a. Thinning of pubic hair
b. Increased size of the uterus
c. Decreased size of the clitoris
d. Loss of tone of the pelvic ligaments

ANS: B
An increased size of the uterus is an abnormal finding and should be assessed further. Normal changes in the reproductive system related to aging include the graying and thinning of pubic hair, decreased size of the labia majora and clitoris, and loss of tone and elasticity of the pelvic ligaments and connective tissue. The uterus would normally be decreased, not increased, in size due to changes in hormonal levels and atrophy.

DIF: Remembering/Knowledge REF: 1431
KEY: Adult life stages| older adult| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. The nurse is assessing a client for reproductive health problems. What would be the priority assessments? (Select all that apply.)
a. Bleeding
b. Pain
c. Sexual orientation
d. Masses
e. Discharge

ANS: A, B, D, E
Bleeding, pain, masses, and discharge are common health problems that bring a client to a health care provider. Sexual orientation is not considered a health problem. Sexual activity should be assessed as part of the clients history.

DIF: Remembering/Knowledge REF: 1432
KEY: Safety| reproductive health problems| assessment

MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. The nurse is reviewing discharge plans with a client who is recovering from a cervical biopsy. Which statements indicate good understanding by the client? (Select all that apply.)
a. I can return to work this afternoon.
b. There should be no problem lifting my 2-year-old toddler when I get home.
c. I cannot douche until the biopsy site is healed.
d. I need to wait for about 2 weeks to have intercourse with my husband.
e. If I have some bleeding, I can use a regular tampon this evening.

ANS: C, D
The client should not douche, have intercourse, or use tampons until the biopsy site is healed. The client should rest for 24 hours after the procedure and should not lift heavy objects.

DIF: Applying/Application REF: 1437
KEY: Medical care| surgical procedures| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 70: Care of Patients with Breast Disorders

MULTIPLE CHOICE

1. The nurse is teaching a 45-year-old woman about her fibrocystic breast condition. Which statement by the client indicates a lack of understanding?
a. This condition will become malignant over time.
b. I should refrain from using hormone replacement therapy.
c. One cup of coffee in the morning should be enough for me.
d. This condition makes it more difficult to examine my breasts.

ANS: A
Fibrocystic breast condition does not increase a womans chance of developing breast cancer. Hormone replacement therapy is not indicated since the additional estrogen may aggravate the condition. Limiting caffeine intake may give relief for tender breasts. The fibrocystic changes to the breasts make it more difficult to examine the breasts because of fibrotic changes and lumps.

DIF: Applying/Application REF: 1441
KEY: Reproductive problems| physiology| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. The nurse is examining a womans breast and notes multiple small mobile lumps. Which question would be the most appropriate for the nurse to ask?
a. When was your last mammogram at the clinic?
b. How many cans of caffeinated soda do you drink in a day?
c. Do the small lumps seem to change with your menstrual period?
d. Do you have a first-degree relative who has breast cancer?

ANS: C
The most appropriate question would be one that relates to benign lesions that usually change in response to hormonal changes within a menstrual cycle. Reduction of caffeine in the diet has been shown to give relief in fibrocystic breast conditions, but research has not found that it has a significant impact. Questions related to the clients last mammogram or breast cancer history are not related to the nurses assessment.

DIF: Applying/Application REF: 1441
KEY: Reproductive problems| nursing assessment| physiology
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

3. A client is diagnosed with a fibrocystic breast condition while in the hospital and is experiencing breast discomfort. What comfort measure would the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Aid in the draining of the cysts by needle aspiration.
b. Teach the client to wear a supportive bra to bed.
c. Administer diuretics to decrease breast swelling.
d. Obtain a cold pack to temporarily relieve the pain.

ANS: D
All of the options would be comfort measures for a client with a fibrocystic breast condition. The UAP can obtain the cold or heat therapy. Only the nurse should aid the health care provider with a needle aspiration, teach, and administer medications.

DIF: Applying/Application REF: 1441
KEY: Reproductive problems| delegation| unlicensed assistive personnel (UAP)| comfort measures MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

4. Which finding in a female client by the nurse would receive the highest priority of further diagnostics?
a. Tender moveable masses throughout the breast tissue

b. A 3-cm firm, defined mobile mass in the lower quadrant of the breast
c. Nontender immobile mass in the upper outer quadrant of the breast
d. Small, painful mass under warm reddened skin

ANS: C
Malignant lesions are hard, nontender, and usually located in the upper outer quadrant of the breast and would be the priority for further diagnostic study. The other lesions are benign breast disorders. The tender moveable masses throughout the breast tissue could be a fibrocystic breast condition. A firm, defined mobile mass in the lower quadrant of the breast is a fibroadenoma, and a painful mass under warm reddened skin could be a local abscess or ductal ectasia.

DIF: Applying/Application REF: 1448
KEY: Reproductive problems| cancer| assessment
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. The nurse is taking the history of a client who is scheduled for breast augmentation surgery. The client reveals that she took two aspirin this morning for a headache. Which action by nurse is best?
a. Take the clients vital signs and record them in the chart.
b. Notify the surgeon about the aspirin ingestion by the client.
c. Warn the client that health insurance may not pay for the procedure.
d. Teach the client about avoiding twisting above the waist after the operation.

ANS: B
The surgeon must be notified immediately since the aspirin could cause increased bleeding during the procedure. Vital signs should be recorded and postoperative teaching should be completed in the preoperative time frame, but these are not the priority since the procedure may be rescheduled. The warning about the clients health insurance is not appropriate at this time.

DIF: Applying/Application REF: 1442
KEY: Reproductive problems| surgical care| patient safety
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

6. A 68-year-old male client is embarrassed about having bilateral breast enlargement. Which statement by the nurse is the most appropriate?
a. Breast cancer in men is quite rare.
b. It is good that you came to be carefully evaluated.
c. Gynecomastia usually comes from overeating.
d. When you get older, the male breast always enlarges.

ANS: B
The most appropriate statement is the one that is supportive of the client. A breast mass should be carefully evaluated for breast cancer, even if it is not common. Gynecomastia as a symptom can be related to antiandrogen agents, aging, obesity, estrogen excess, or lack of androgens.

DIF: Applying/Application REF: 1442
KEY: Reproductive problems| caring| patient-centered care
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Psychosocial Integrity

7. With a history of breast cancer in the family, a 48-year-old female client is interested in learning about the modifiable risk factors for breast cancer. After the nurse explains this information, which statement made by the client indicates that more teaching is needed?
a. I am fortunate that I breast-fed each of my three children for 12 months.
b. It looks as though I need to start working out at the gym more often.
c. I am glad that we can still have wine with every evening meal.
d. When I have menopausal symptoms, I must avoid hormone replacement therapy.

ANS: C
Modifiable risk factors can help prevent breast cancer. The client should lessen alcohol intake and not have wine 7 days a week. Breast-feeding, regular exercise, and avoiding hormone replacement are also strategies for breast cancer prevention.

DIF: Applying/Application REF: 1444
KEY: Reproductive problems| cancer| health promotion
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

8. A 37-year-old Nigerian woman is at high risk for breast cancer and is considering a prophylactic mastectomy and oophorectomy. What action by the nurse is most appropriate?
a. Discourage this surgery since the woman is still of childbearing age.
b. Reassure the client that reconstructive surgery is as easy as breast augmentation.
c. Inform the client that this surgery removes all mammary tissue and cancer risk.
d. Include support people, such as the male partner, in the decision making.

ANS: D
The cultural aspects of decision making need to be considered. In the Nigerian culture, the man often makes the decisions for care of the female. Women with a high risk for breast cancer can consider prophylactic surgery. If reconstructive surgery is considered, the procedure is more complex and will have more complications compared to a breast augmentation. There is a small risk that breast cancer can still develop in the remaining mammary tissue.

DIF: Applying/Application REF: 1447
KEY: Reproductive problems| cancer| caring| culture
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

9. A 35-year-old woman is diagnosed with stage III breast cancer. She seems to be extremely anxious. What action by the nurse is best?
a. Encourage the client to search the Internet for information tonight.
b. Ask the client if sexuality has been a problem with her partner.
c. Explore the idea of a referral to a breast cancer support group.
d. Assess whether there has been any mental illness in her past.

ANS: C
Support for the diagnosis would be best with a referral to a breast cancer support group. The Internet may be a good source of information, but the day of diagnosis would be too soon. The nurse could assess the frequency and satisfaction of sexual relations but should not assume that there is a problem in that area. Assessment of mental illness is not an appropriate action.

DIF: Applying/Application REF: 1448
KEY: Reproductive problems| cancer| caring
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

10. A client has just returned from a right radical mastectomy. Which action by the unlicensed assistive personnel (UAP) would the nurse consider unsafe?
a. Checking the amount of urine in the urine catheter collection bag
b. Elevating the right arm on a pillow
c. Taking the blood pressure on the right arm
d. Encouraging the client to squeeze a rolled washcloth

ANS: C
Health care professionals need to avoid the arm on the side of the surgery for blood pressure measurement, injections, or blood draws. Since lymph nodes are removed, lymph drainage would be compromised. The pressure from the blood pressure cuff could promote swelling. Infection could occur with injections and blood draws. Checking urine output, elevation of the affected arm on a pillow, and encouraging beginning exercises

are all safe postoperative interventions.

DIF: Applying/Application REF: 1452
KEY: Reproductive problems| cancer| postoperative nursing| patient safety| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

11. A client is discharged to home after a modified radical mastectomy with two drainage tubes. Which statement by the client would indicate that further teaching is needed?
a. I am glad that these tubes will fall out at home when I finally shower.
b. I should measure the drainage each day to make sure it is less than an ounce.
c. I should be careful how I lie in bed so that I will not kink the tubing.
d. If there is a foul odor from the drainage, I should contact my doctor.

ANS: A
The drainage tubes (such as a Jackson-Pratt drain) lie just under the skin but need to be removed by the health care professional in about 1 to 3 weeks at an office visit. Drainage should be less than 25 mL in a days time. The client should be aware of her positioning to prevent kinking of the tubing. A foul odor from the drainage may indicate an infection; the doctor should be contacted immediately.

DIF: Applying/Application REF: 1453
KEY: Reproductive problems| cancer| postoperative nursing
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

12. What comfort measure can only be performed by a nurse, as opposed to an unlicensed assistive personnel (UAP), for a client who returned from a left modified radical mastectomy 4 hours ago?
a. Placing the head of bed at 30 degrees
b. Elevating the left arm on a pillow
c. Administering morphine for pain at a 4 on a 0-to-10 scale
d. Supporting the left arm while initially ambulating the client

ANS: C
Only the nurse is authorized to administer medications, but the UAP could inform the nurse about the rating of pain by the client. The UAP could position the bed to 30 degrees and elevate the clients arm on a pillow to facilitate lymphatic fluid drainage return. The clients arm should be supported while walking at first but then allowed to hang straight by the side. The UAP could support the arm while walking the client.

DIF: Applying/Application REF: 1453
KEY: Reproductive problems| delegation| comfort measures| cancer| unlicensed assistive personnel (UAP)
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

13. During dressing changes, the nurse assesses a client who has had breast reconstruction. Which finding would cause the nurse to take immediate action?
a. Slightly reddened incisional area
b. Blood pressure of 128/75 mm Hg
c. Temperature of 99 F (37.2 C)
d. Dusky color of the flap

ANS: D
A dusky color of the breast flap could indicate poor tissue perfusion and a decreased capillary refill. The nurse should notify the surgeon to preserve the tissue. It is normal to have a slightly reddened incision as the skin heals. The blood pressure is within normal limits and the temperature is slightly elevated but should be monitored.

DIF: Applying/Application REF: 1455
KEY: Reproductive problems| cancer| postoperative care| nursing assessment

MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A client is starting hormonal therapy with tamoxifen (Nolvadex) to lower the risk for breast cancer. What information needs to be explained by the nurse regarding the action of this drug?
a. It blocks the release of luteinizing hormone.
b. It interferes with cancer cell division.
c. It selectively blocks estrogen in the breast.
d. It inhibits DNA synthesis in rapidly dividing cells.

ANS: C
Tamoxifen (Nolvadex) reduces the estrogen available to breast tumors to stop or prevent growth. This drug does not block the release of luteinizing hormone to prevent the ovaries from producing estrogen; leuprolide (Lupron) does this. Chemotherapy agents such as ixabepilone (Ixempra) interfere with cancer cell division, and doxorubicin (Adriamycin) inhibits DNA synthesis in susceptible cells.

DIF: Remembering/Knowledge REF: 1456
KEY: Reproductive problems| cancer| hormone therapy
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

15. A client is placed on a medical regimen of doxorubicin (Adriamycin), cyclophosphamide (Cytoxan), and fluorouracil (5-FU) for breast cancer. Which side effect seen in the client should the nurse report to the provider immediately?
a. Shortness of breath
b. Nausea and vomiting
c. Hair loss
d. Mucositis

ANS: A
Doxorubicin (Adriamycin) can cause cardiac problems with symptoms of extreme fatigue, shortness of breath, chronic cough, and edema. These need to be reported as soon as possible to the provider. Nausea, vomiting, hair loss, and mucositis are common problems associated with chemotherapy regimens.

DIF: Applying/Application REF: 1456
KEY: Reproductive problems| cancer| chemotherapy
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A client is concerned about the risk of lymphedema after a mastectomy. Which response by the nurse is best?
a. You do not need to worry about lymphedema since you did not have radiation therapy.
b. A risk factor for lymphedema is infection, so wear gloves when gardening outside.
c. Numbness, tingling, and swelling are common sensations after a mastectomy.
d. The risk for lymphedema is a real threat and can be very self-limiting.

ANS: B
Infection can create lymphedema; therefore, the client needs to be cautious with activities using the affected arm, such as gardening. Radiation therapy is just one of the factors that could cause lymphedema. Other risk factors include obesity and the presence of axillary disease. The symptoms of lymphedema are heaviness, aching, fatigue, numbness, tingling, and swelling, and are not common after the surgery. Women with lymphedema live fulfilling lives.

DIF: Applying/Application REF: 1457
KEY: Reproductive problems| cancer| postoperative nursing
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Health Promotion and Maintenance

17. A woman diagnosed with breast cancer had these laboratory tests performed at an office visit:

Alkaline phosphatase 125 U/L
Total calcium 12 mg/dL
Hematocrit 39%
Hemoglobin 14 g/dL
Which test results indicate to the nurse that some further diagnostics are needed?
a. Elevated alkaline phosphatase and calcium suggests bone involvement.
b. Only alkaline phosphatase is decreased, suggesting liver metastasis.
c. Hematocrit and hemoglobin are decreased, indicating anemia.
d. The elevated hematocrit and hemoglobin indicate dehydration.

ANS: A
The alkaline phosphatase (normal value 30 to 120 U/L) and total calcium (normal value 9 to 10.5 mg/dL) levels are both elevated, suggesting bone metastasis. Both the hematocrit and hemoglobin are within normal limits for females.

DIF: Applying/Application REF: 1449
KEY: Reproductive problems| cancer| laboratory values
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE

1. The nurse is taking a history of a 68-year-old woman. What assessment findings would indicate a high risk for the development of breast cancer? (Select all that apply.)
a. Age greater than 65 years
b. Increased breast density
c. Osteoporosis
d. Multiparity
e. Genetic factors

ANS: A, B, E
The high risk factors for breast cancer are age greater than 65 with the risk increasing until age 80; an increase in breast density because of more glandular and connective tissue; and inherited mutations of BRCA1 and/or BRCA2 genes. Osteoporosis and multiparity are not risk factors for breast cancer. A high postmenopausal bone density and nulliparity are moderate and low increased risk factors, respectively.

DIF: Remembering/Knowledge REF: 1445
KEY: Reproductive problems| cancer| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. The nurse is formulating a teaching plan according to evidence-based breast cancer screening guidelines for a 50-year-old woman with low risk factors. Which diagnostic methods should be included in the plan? (Select all that apply.)
a. Annual mammogram
b. Magnetic resonance imaging (MRI)
c. Breast ultrasound
d. Breast self-awareness
e. Clinical breast examination

ANS: A, D, E
Guidelines recommend a screening annual mammogram for women ages 40 years and older, breast self-awareness, and a clinical breast examination. An MRI is recommended if there are known high risk factors. A breast ultrasound is used if there are problems discovered with the initial screening or dense breast tissue.

DIF: Applying/Application REF: 1446
KEY: Reproductive problems| cancer| clinical practice guidelines| health promotion
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. After a breast examination, the nurse is documenting assessment findings that indicate possible breast cancer. Which abnormal findings need to be included as part of the clients electronic medical record? (Select all that apply.)
a. Peau dorange
b. Dense breast tissue
c. Nipple retraction
d. Mobile mass at two oclock
e. Nontender axillary nodes

ANS: A, C, D
In the documentation of a breast mass, skin changes such as dimpling (peau dorange), nipple retraction, and whether the mass is fixed or movable are charted. The location of the mass should be stated by the face of a clock. Dense breast tissue and nontender axillary nodes are not abnormal assessment findings that may indicate breast cancer.

DIF: Remembering/Knowledge REF: 1448
KEY: Reproductive problems| cancer| nursing assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A woman has been using acupuncture to treat the nausea and vomiting caused by the side effects of chemotherapy for breast cancer. Which conditions would cause the nurse to recommend against further use of acupuncture? (Select all that apply.)
a. Lymphedema
b. Bleeding tendencies
c. Low white blood cell count
d. Elevated serum calcium
e. High platelet count

ANS: A, B, C
Acupuncture could be unsafe for the client if there is poor drainage of the extremity with lymphedema or if there was a bleeding tendency and low white blood cell count. Coagulation would be compromised with a bleeding disorder, and the risk of infection would be high with the use of needles. An elevated serum calcium and high platelet count would not have any contraindication for acupuncture.

DIF: Remembering/Knowledge REF: 1451
KEY: Reproductive problems| cancer| safety
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

SHORT ANSWER

1. A client states that she rates her pain as a 5 on a 0-to-10 scale post-mastectomy. The provider has ordered morphine 4 mg for moderate pain every 4 hours. The morphine is supplied in a solution of 8 mg/mL. How many mL will the nurse administer? ____ mL

ANS:
0.5 mL

$8x = 4$
$x = 0.5$ mL

DIF: Applying/Application REF: 1460
KEY: Postoperative| pain| opioid analgesics| drug calculation
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 71: Care of Patients with Gynecologic Problems

MULTIPLE CHOICE

1. Which action would the nurse teach to help the client prevent vulvovaginitis?
a. Wipe back to front after urination.
b. Cleanse the inner labial mucosa with soap and water.
c. Use feminine hygiene sprays to avoid odor.
d. Wear loose cotton underwear.

ANS: D
To prevent vulvovaginitis, the client should wear cotton underwear. The client should wipe front to back after urination, not back to front. The client should cleanse the inner labial mucosa with water only, and avoid using feminine hygiene sprays.

DIF: Remembering/Knowledge REF: 1462
KEY: Patient education| hygiene| self-care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. The nurse is educating a client on the prevention of toxic shock syndrome (TSS). Which statement by the client indicates a lack of understanding?
a. I need to change my tampon every 8 hours during the day.
b. At night, I should use a feminine pad rather than a tampon.
c. If I dont use tampons, I should not get TSS.
d. It is best if I wash my hands before inserting the tampon.

ANS: A
Tampons need to be changed every 3 to 6 hours to avoid infection by such organisms as Staphylococcus aureus. All of the other responses are correct: use of feminine pads at night, not using tampons at all, and washing hands before tampon insertion are all strategies to prevent TSS.

DIF: Applying/Application REF: 1462
KEY: Infection control| patient education| self-care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A client is admitted to the emergency department with toxic shock syndrome. Which action by the nurse is the most important?
a. Administer IV fluids to maintain fluid and electrolyte balance.
b. Remove the tampon as the source of infection.
c. Collect a blood specimen for culture and sensitivity.
d. Transfuse the client to manage low blood count.

ANS: B
The source of infection should be removed first. All of the other answers are possible interventions depending on the clients symptoms and vital signs, but removing the tampon is the priority.

DIF: Applying/Application REF: 1462
KEY: Emergency nursing| sepsis| shock
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. A 55-year-old post-menopausal woman is assessed by the nurse with a history of dyspareunia, backache, pelvis pressure, urinary tract infections, and a frequent urinary urgency. Which condition does the nurse suspect?
a. Ovarian cyst
b. Rectocele
c. Cystocele

d. Fibroid

ANS: C
Dyspareunia, backache, pelvis pressure, urinary tract infections, and urinary urgency are all symptoms of a cystocelea protrusion of the bladder through the vaginal wall. Ovarian cysts are rare after menopause. A rectocele is associated with constipation, hemorrhoids, and fecal impaction. Fibroids are associated with heavy bleeding.

DIF: Remembering/Knowledge REF: 1463
KEY: Pain| reproductive system
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. The nurse is caring for a postoperative client following an anterior colporrhaphy. What action can be delegated to the unlicensed assistive personnel (UAP)?
a. Reviewing the hematocrit and hemoglobin results
b. Teaching the client to avoid lifting her 4-year-old grandson
c. Assessing the level of pain and any drainage
d. Drawing a shallow hot bath for comfort measures

ANS: D
The UAP is able to provide comfort through a bath. The registered nurse should review any laboratory results, complete any teaching, and assess pain and discharge.

DIF: Applying/Application REF: 1464
KEY: Delegation| Unlicensed assistive personnel (UAP)| comfort measures| postoperative nursing MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

6. A nurse is caring for four postoperative clients who each had a total abdominal hysterectomy. Which client should the nurse assess first upon initial rounding?
a. Client who has had two saturated perineal pads in the last 2 hours
b. Client with a temperature of 99 F and blood pressure of 115/73 mm Hg
c. Client who has pain of 4 on a scale of 0 to 10
d. Client with a urinary catheter output of 150 mL in the last 3 hours

ANS: A
Normal vaginal bleeding should be less than one saturated perineal pad in 4 hours. Two saturated pads in such a short time could indicate hemorrhage, which is a priority. The other clients also have needs, but the client with excessive bleeding should be assessed first.

DIF: Applying/Application REF: 1467
KEY: Postoperative nursing| reproductive problems| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

7. A client has undergone a vaginal hysterectomy with a bilateral salpingo-oophorectomy. She is concerned about a loss of libido. What intervention by the nurse would be best?
a. Suggest increasing vitamins and supplements daily.
b. Discuss the value of a balanced diet and exercise.
c. Reinforce that weight gain may be inevitable.
d. Teach that estrogen cream inserted vaginally may help.

ANS: D
Use of vaginal estrogen cream and gentle dilation can help with vaginal changes and loss of libido. Weight gain and masculinization are misperceptions after a vaginal hysterectomy. Vitamins, supplements, a balanced diet, and exercise are helpful for healthy living, but are not necessarily going to increase libido.

DIF: Applying/Application REF: 1466

KEY: Sexuality| postoperative nursing| hormone therapy
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A client has a recurrent Bartholin cyst. What is the nurses priority action?
a. Apply an ice pack to the area.
b. Administer a prophylactic antibiotic.
c. Obtain a fluid sample for laboratory analysis.
d. Suggest moist heat such as a sitz bath.

ANS: C
A major cause of an obstructed duct forming a cyst is infection. The laboratory specimen is a priority since a culture is needed in order to prescribe sensitive antibiotics. Comfort measures can then be used, such as ice packs and moist heat.

DIF: Applying/Application REF: 1468
KEY: Infection| skin integrity| comfort measures
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

9. The nurse is doing preoperative teaching for a client who is scheduled for removal of cervical polyps in the office. Which statement by the client indicates a correct understanding of the procedure?
a. I hope that I do not have cancer of the cervix.
b. There should be little or no discomfort during the procedure.
c. There may be a lot of bleeding after the polyp is removed.
d. This may prevent me from having any more children.

ANS: B
Polyp removal is a simple office procedure with the client feeling no pain. The other responses are incorrect. Cervical polyps are the most common benign growth of the cervix. Cautery is used to stop any bleeding, and there is no evidence that cervical polyps have a relationship to childbearing.

DIF: Applying/Application REF: 1468
KEY: Preoperative nursing| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

10. A client has recently been diagnosed with stage III endometrial cancer and asks the nurse for an explanation. What response by the nurse is correct about the staging of the cancer?
a. The cancer has spread to the mucosa of the bowel and bladder.
b. It has reached the vagina or lymph nodes.
c. The cancer now involves the cervix.
d. It is contained in the endometrium of the cervix.

ANS: B
Stage III of endometrial cancer reaches the vagina or lymph nodes. Stage I is confined to the endometrium. Stage II involves the cervix, and stage IV spreads to the bowel or bladder mucosa and/or beyond the pelvis.

DIF: Remembering/Knowledge REF: 1468
KEY: Cancer| pathophysiology| reproductive problems
MSC: Integrated Process: Communication
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. The client is emotionally upset about the recent diagnosis of stage IV endometrial cancer. Which action by the nurse is best?
a. Let the client alone for a long period of reflection time.
b. Ask friends and relatives to limit their visits.
c. Tell the client that an emotional response is unacceptable.
d. Create an atmosphere of acceptance and discussion.

ANS: D
Discussion of a clients concerns about the presence of cancer and the potential for recurrence will provide emotional support and allay fears. Coping behaviors are encouraged with the support of friends and relatives. An emotional response should be accepted.

DIF: Applying/Application REF: 1469
KEY: Cancer| caring| coping MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

12. A client has scheduled brachytherapy sessions and states that she feels as though she is not safe around her family. What is the best response by the nurse?
a. You are only reactive when the radioactive implant is in place.
b. To be totally safe, it is a good idea to sleep in a separate room.
c. It is best to stay a safe distance from friends or family between treatments.
d. You should use a separate bathroom from the rest of the family.

ANS: A
In brachytherapy, the surgeon inserts an applicator into the uterus. After placement is verified, the radioactive isotope is placed in the applicator for several minutes for a single treatment. There are no restrictions for the woman to stay away from her family or the public between treatments.

DIF: Applying/Application REF: 1470
KEY: Cancer| caring| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

13. A client has just returned from a total abdominal hysterectomy and needs postoperative nursing care. What action can the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Assess heart, lung, and bowel sounds.
b. Check the hemoglobin and hematocrit levels.
c. Evaluate the dressing for drainage.
d. Empty the urine from the urinary catheter bag.

ANS: D
The UAP is able to empty the urinary output from the catheter. The nurse would assess the heart, lung, and bowel sounds; check the hemoglobin and hematocrit levels; and evaluate the drainage on the dressing.

DIF: Analyzing/Analysis REF: 1474
KEY: Postoperative care| delegation| reproductive problems| unlicensed assistive personnel (UAP) MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. A 20-year-old client is interested in protection from the human papilloma virus (HPV) since she may become sexually active. Which response from the nurse is the most accurate?
a. You are too old to receive an HPV vaccine.
b. Either Gardasil or Cervarix can provide protection.
c. You will need to have three injections over a span of 1 year.
d. The most common side effect of the vaccine is itching at the injection site.

ANS: B
Current HPV vaccines are Gardasil and Cervarix, which should be given before the first sexual contact to protect against the highest risk HPV types associated with cervical cancer. The client is not too old since it is recommended that young women up to 26 years should receive an HPV vaccine. The entire series consists of three injections over 6 months, not 1 year. Local pain and redness surrounding the injection site are very common, but this does not include itching.

DIF: Analyzing/Analysis REF: 1471
KEY: Patient education| infection control| reproductive problems
MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. A 28-year-old client is diagnosed with endometriosis and is experiencing severe symptoms. Which actions by the nurse are the most appropriate at this time? (Select all that apply.)
a. Reduce the pain by low-level heat.
b. Discuss the high risk of infertility with this diagnosis.
c. Relieve anxiety by relaxation techniques and education.
d. Discuss in detail the side effects of laparoscopic surgery.
e. Suggest resources such as the Endometriosis Association.

ANS: A, C, E
With endometriosis, pain is the predominant symptom, with anxiety occurring because of the diagnosis. Interventions should be directed to pain and anxiety relief, such as low-level heat, relaxation techniques, and education about the pathophysiology and possible treatment of endometriosis. The nurse could suggest resources to give more information about the diagnosis. Discussion of the possibility of infertility and side effects of laparoscopic surgery is premature and may increase the anxiety.

DIF: Applying/Application REF: 1460
KEY: Pain| caring| nursing intervention
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

2. The nurse is giving discharge instructions to a client who had a total abdominal hysterectomy. Which statements by the client indicate a need for further teaching? (Select all that apply.)
a. I should not have any problems driving to see my mother, who lives 3 hours away.
b. Now that I have time off from work, I can return to my exercise routine next week.
c. My granddaughter weighs 23 pounds, so I need to refrain from picking her up.
d. I will have to limit the times that I climb our stairs at home to morning and night.
e. For 1 month, I will need to refrain from sexual intercourse.

ANS: A, B
Driving and sitting for extended periods of time should be avoided until the surgeon gives permission. For 2 to 6 weeks, exercise participation should also be avoided. All of the other responses demonstrate adequate knowledge for discharge. The client should not lift anything heavier than 10 pounds, should limit stair climbing, and should refrain from sexual intercourse.

DIF: Applying/Application REF: 1467
KEY: Postoperative nursing| reproductive problems| discharge planning/teaching
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. The nurse is taking the history of a 24-year-old client diagnosed with cervical cancer. What possible risk factors would the nurse assess? (Select all that apply.)
a. Smoking
b. Multiple sexual partners
c. Poor diet
d. Nulliparity
e. Younger than 18 at first intercourse

ANS: A, B, C, E
Smoking, multiple sexual partners, poor diet, and age less than 18 for first intercourse are all risk factors for cervical cancer. Nulliparity is a risk factor for endometrial cancer.

DIF: Remembering/Knowledge REF: 1469
KEY: Cancer| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

4. A client is scheduled to start external beam radiation therapy (EBRT) for her endometrial cancer. Which teaching by the nurse is accurate? (Select all that apply.)
a. You will need to be hospitalized during this therapy.
b. Your skin needs to be inspected daily for any breakdown.
c. It is not wise to stay out in the sun for long periods of time.
d. The perineal area may become damaged with the radiation.
e. The technician applies new site markings before each treatment.

ANS: B, C, D
EBRT is usually performed in ambulatory care and does not require hospitalization. The client needs to know to evaluate the skin, especially in the perineal area, for any breakdown, and avoid sunbathing. The technician does not apply new site markings, so the client needs to avoid washing off the markings that indicate the treatment site.

DIF: Applying/Application REF: 1470
KEY: Cancer| reproductive problems| radiation
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

5. The nurse is teaching a client who is undergoing brachytherapy about what to immediately report to her health care provider. Which signs and symptoms would be included in this teaching? (Select all that apply.)
a. Constipation for 3 days
b. Temperature of 99 F
c. Abdominal pain
d. Visible blood in the urine
e. Heavy vaginal bleeding

ANS: C, D, E
Health teaching for a client having brachytherapy should emphasize reporting abdominal pain, visible blood in the urine, and heavy vaginal bleeding. Severe diarrhea (not constipation), urethral burning, extreme fatigue, and a fever over 100 F should also be reported.

DIF: Remembering/Knowledge REF: 1470
KEY: Cancer| reproductive problems| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A postmenopausal client is experiencing low back and pelvic pain, fatigue, and bloody vaginal discharge. What laboratory tests would the nurse expect to see ordered for this client if endometrial cancer is suspected? (Select all that apply.)
a. Cancer antigen-125 (CA-125)
b. White blood cell (WBC) count
c. Hemoglobin and hematocrit (H&H)
d. International normalized ratio (INR)
e. Prothrombin time (PT)

ANS: A, C
Serum tumor markers such as CA-125 assess for metastasis, especially if elevated. H&H would evaluate the possibility of anemia, a common finding with postmenopausal bleeding with endometrial cancer. WBC count is not indicated since there are no signs of infection. The INR and PT are coagulation tests to measure the time it takes for a fibrin clot to form. They are used to evaluate the extrinsic pathway of coagulation in clients receiving oral warfarin.

DIF: Analyzing/Analysis REF: 1473
KEY: Cancer| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

SHORT ANSWER

1. A client who had a hysterectomy has a 200-mg dose of ciprofloxacin (Cipro) ordered to infuse in 30 minutes. At what rate should the nurse infuse the medication if the pharmacy provides 200 mg in a 100-mL bag of normal saline? (Record your answer using a whole number.) ___ mL/hr

ANS:
200 mL/hr
100 mL 2 = 200 mL/hr.

DIF: Analyzing/Analysis REF: 1474
KEY: Reproductive problems| postoperative nursing| drug calculation| antibiotics
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

Chapter 72: Care of Patients with Male Reproductive Problems

MULTIPLE CHOICE

1. The nurse is conducting a history on a male client to determine the severity of symptoms associated with prostate enlargement. Which finding is cause for prompt action by the nurse?

a. Cloudy urine

b. Urinary hesitancy

c. Post-void dribbling

d. Weak urinary stream

ANS: A

Cloudy urine could indicate infection due to possible urine retention and should be a priority action. Common symptoms of benign prostatic hyperplasia are urinary hesitancy, post-void dribbling, and a weak urinary stream due to the enlarged prostate causing bladder outlet obstruction.

DIF: Applying/Application REF: 1474

KEY: Reproductive problems| pathophysiology| nursing assessment

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

2. A client is diagnosed with benign prostatic hyperplasia and seems sad and irritable. After assessing the clients behavior, which statement by the nurse would be the most appropriate?

a. The urine incontinence should not prevent you from socializing.

b. You seem depressed and should seek more pleasant things to do.

c. It is common for men at your age to have changes in mood.

d. Nocturia could cause interruption of your sleep and cause changes in mood.

ANS: D

Frequent visits to the bathroom during the night could cause sleep interruptions and affect the clients mood and mental status. Incontinence could cause the client to feel embarrassment and cause him to limit his activities outside the home. The social isolation could lead to clinical depression and should be treated professionally. The nurse should not give advice before exploring the clients response to his change in behavior. The statement about age has no validity.

DIF: Applying/Application REF: 1474

KEY: Reproductive problems| caring| support

MSC: Integrated Process: Communication and Documentation

NOT: Client Needs Category: Psychosocial Integrity

3. A 55-year-old African-American client is having a visit with his health care provider. What test should the nurse discuss with the client as an option to screen for prostate cancer, even though screening is not routinely recommended?

a. Complete blood count

b. Culture and sensitivity

c. Prostate-specific antigen

d. Cystoscopy

ANS: C

The prostate-specific antigen test should be discussed as an option for prostate cancer screening. A complete blood count and culture and sensitivity laboratory test will be ordered if infection is suspected. A cystoscopy would be performed to assess the effect of a bladder neck obstruction.

DIF: Understanding/Comprehension REF: 1481

KEY: Reproductive problems| diversity| diagnostic examination

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

4. The nurse is teaching a client with benign prostatic hyperplasia (BPH). What statement indicates a lack of understanding by the client?

a. There should be no problem with a glass of wine with dinner each night.

b. I am so glad that I weaned myself off of coffee about a year ago.

c. I need to inform my allergist that I cannot take my normal decongestant.

d. My normal routine of drinking a quart of water during exercise needs to change.

ANS: A

This client did not associate wine with the avoidance of alcohol, and requires additional teaching. The nurse must teach a client with BPH to avoid alcohol, caffeine, and large quantities of fluid in a short amount of time to prevent overdistention of the bladder. Decongestants also need to be avoided to lower the chance for urinary retention.

DIF: Applying/Application REF: 1477

KEY: Reproductive problems| patient education

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

5. A client has returned from a transurethral resection of the prostate with a continuous bladder irrigation. Which action by the nurse is a priority if bright red urinary drainage and clots are noted 5 hours after the surgery?

a. Review the hemoglobin and hematocrit as ordered.

b. Take vital signs and notify the surgeon immediately.

c. Release the traction on the three-way catheter.

d. Remind the client not to pull on the catheter.

ANS: B

Bright red urinary drainage with clots may indicate arterial bleeding. Vital signs should be taken and the surgeon notified. The traction on the three-way catheter should not be released since it places pressure at the surgical site to avoid bleeding. The nurses review of hemoglobin and hematocrit and reminding the client not to pull on the catheter are good choices, but not the priority at this time.

DIF: Applying/Application REF: 1479

KEY: Reproductive problems| postoperative nursing| client safety

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

6. A nurse and an unlicensed assistive personnel (UAP) are caring for a client with an open radical prostatectomy. Which comfort measure could the nurse delegate to the UAP?

a. Administering an antispasmodic for bladder spasms

b. Managing pain through patient-controlled analgesia

c. Applying ice to a swollen scrotum and penis

d. Helping the client transfer from the bed to the chair

ANS: D

The UAP could aid the client in transferring from the bed to the chair and with ambulation. The nurse would be responsible for medication administration, assessment of swelling, and the application of ice if needed.

DIF: Applying/Application REF: 1483

KEY: Reproductive problems| postoperative nursing| comfort measures| unlicensed assistive personnel (UAP)

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A client is diagnosed with metastatic prostate cancer. The client asks the nurse the purpose of his treatment with the luteinizing hormonereleasing hormone (LH-RH) agonist leuprolide (Lupron) and the bisphosphonate pamidronate (Aredia). Which statement by the nurse is most appropriate?

a. The treatment reduces testosterone and prevents bone fractures.

b. The medications prevent erectile dysfunction and increase libido.

c. There is less gynecomastia and osteoporosis with this drug regimen.

d. These medications both inhibit tumor progression by blocking androgens.

ANS: A

Lupron, an LH-RH agonist, stimulates the pituitary gland to release luteinizing hormone (LH) to the point that the gland is depleted of LH and testosterone production is lessened. This may decrease the prostate cancer since it is hormone dependent. Lupron can cause osteoporosis, which results in the need for Aredia to prevent bone loss. Erectile dysfunction, decreased libido, and gynecomastia are side effects of the LH-RH medications. Antiandrogen drugs inhibit tumor progression by blocking androgens at the site of the prostate.

DIF: Applying/Application REF: 1484

KEY: Reproductive problems| cancer| bisphosphonates| hormone therapy

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

8. The nurse is administering sulfamethoxazole-trimethoprim (Bactrim) to a client diagnosed with bacterial prostatitis. Which finding causes the nurse to question this medication for this client?

a. Urinary tract infection

b. Allergy to sulfa medications

c. Hematuria

d. Elevated serum white blood cells

ANS: B

Before administering sulfamethoxazole-trimethoprim, the nurse must assess if the client is allergic to sulfa

drugs. Urinary tract infection, hematuria, and elevated serum white blood cells are common problems associated with bacterial prostatitis that require long-term antibiotic therapy.

DIF: Applying/Application REF: 1486

KEY: Reproductive problems| patient safety| antibiotics

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. A 55-year-old male client is admitted to the emergency department with symptoms of a myocardial infarction. Which question by the nurse is the most appropriate before administering nitroglycerin?

a. On a scale from 0 to 10, what is the rating of your chest pain?

b. Are you allergic to any food or medications?

c. Have you taken any drugs like Viagra recently?

d. Are you light-headed or dizzy right now?

ANS: C

Phosphodiesterase-5 inhibitors such as sildenafil (Viagra) relax smooth muscles to increase blood flow to the penis for treatment of erectile dysfunction. In combination with nitroglycerin, there can be extreme hypotension with reduction of blood flow to vital organs. The other questions are appropriate but not the highest priority before administering nitroglycerin.

DIF: Applying/Application REF: 1486

KEY: Reproductive problems| medical emergencies| patient safety| nitroglycerin/nitrates

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

10. A 34-year-old client comes to the clinic with concerns about an enlarged left testicle and heaviness in his lower abdomen. Which diagnostic test would the nurse expect to be ordered to confirm testicular cancer?

a. Alpha-fetoprotein (AFP)

b. Prostate-specific antigen (PSA)

c. Prostate acid phosphatase (PAP)

d. C-reactive protein (CRP)

ANS: A

AFP is a glycoprotein that is elevated in testicular cancer. PSA and PAP testing is used in the screening of prostate cancer. CRP is diagnostic for inflammatory conditions.

DIF: Remembering/Knowledge REF: 1488

KEY: Reproductive problems| cancer| laboratory values

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

11. A 25-year-old client has recently been diagnosed with testicular cancer and is scheduled for radiation therapy. Which intervention by the nurse is best?

a. Ask the client about his support system of friends and relatives.

b. Encourage the client to verbalize his fears about sexual performance.

c. Explore with the client the possibility of sperm collection.

d. Provide privacy to allow time for reflection about the treatment.

ANS: C

Sperm collection is a viable option for a client diagnosed with testicular cancer and should be completed before radiation therapy, chemotherapy, or radical lymph node dissection. The other options would promote psychosocial support but are not the priority intervention.

DIF: Applying/Application REF: 1488

KEY: Reproductive problems| cancer| coping

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Psychosocial Integrity

12. A 70-year-old client returned from a transurethral resection of the prostate 8 hours ago with a continuous bladder irrigation. The nurse reviews his laboratory results as follows:

Sodium	128 mEq/L
Hemoglobin	14 g/dL
Hematocrit	42%
Red blood cell count	4.5

What action by the nurse is the most appropriate?

a. Consider starting a blood transfusion.

b. Slow down the bladder irrigation if the urine is pink.

c. Report the findings to the surgeon immediately.

d. Take the vital signs every 15 minutes.

ANS: B

The serum sodium is decreased due to large-volume bladder irrigation (normal is 136 to 145 mEq/L). By slowing the irrigation, there will be less fluid overload and sodium dilution. The hemoglobin and hematocrit values are a low normal, with a slight decrease in the red blood cell count. Therefore, a blood transfusion or frequent vital signs should not be necessary. Immediate report to the surgeon is not necessary.

DIF: Analyzing/Analysis REF: 1479

KEY: Reproductive problems| fluid and electrolyte imbalance| postoperative nursing

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. The nurse is teaching an uncircumcised 65-year-old client about self-management of a urinary catheter in preparation for discharge to his home. What statement indicates a lack of understanding by the client?

a. I only have to wash the outside of the catheter once a week.

b. I should take extra time to clean the catheter site by pushing the foreskin back.

c. The drainage bag needs to be changed at least once a week and as needed.

d. I should pour a solution of vinegar and water through the tubing and bag.

ANS: A

The first few inches of the catheter must be washed daily starting at the penis and washing outward with soap and water. The other options are correct for self-management of a urinary catheter in the home setting.

DIF: Remembering/Knowledge REF: 1485

KEY: Reproductive problems| patient education

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

MULTIPLE RESPONSE

1. The nurse is administering finasteride (Proscar) and doxazosin (Cardura) to a 67-year-old client with benign prostatic hyperplasia. What precautions are related to the side effects of these medications? **(Select all that**

apply.)

a. Assessing for blood pressure changes when lying, sitting, and arising from the bed

b. Immediately reporting any change in the alanine aminotransferase laboratory test

c. Teaching the client about the possibility of increased libido with these medications

d. Taking the clients pulse rate for a minute in anticipation of bradycardia

e. Asking the client to report any weakness, light-headedness, or dizziness

ANS: A, B, E

Both the 5-alpha-reductase inhibitor (5-ARI) and the $alpha_1$-selective blocking agents can cause orthostatic (postural) hypotension and liver dysfunction. The 5-ARI agent (Proscar) can cause a decreased libido rather than an increased sexual drive. The alpha-blocking drug (Cardura) can cause tachycardia rather than bradycardia.

DIF: Analyzing/Analysis REF: 1477

KEY: Reproductive problems| patient education| adverse effects

MSC: Integrated Process: Nursing Process: Implementation

NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A client is interested in learning about the risk factors for prostate cancer. Which factors does the nurse include in the teaching? **(Select all that apply.)**

a. Family history of prostate cancer

b. Smoking

c. Obesity

d. Advanced age

e. Eating too much red meat

f. Race

ANS: A, D, E, F

Advanced family history of prostate cancer, age, a diet high in animal fat, and race are all risk factors for prostate cancer. Smoking and obesity are not known risk factors.

DIF: Remembering/Knowledge REF: 1481

KEY: Reproductive problems| lifestyle factors| patient education

MSC: Integrated Process: Teaching/Learning

NOT: Client Needs Category: Health Promotion and Maintenance

3. A client came to the clinic with erectile dysfunction. What are some possible causes of this condition that the nurse could discuss with the client during history taking? **(Select all that apply.)**

a. Recent prostatectomy

b. Long-term hypertension

c. Diabetes mellitus

d. Hour-long exercise sessions

e. Consumption of beer each night

ANS: A, B, C, E

Organic erectile dysfunction can be caused by surgical procedures, hypertension and its treatment, diabetes mellitus, and alcohol consumption. There is no evidence that exercise is related to this problem.

DIF: Remembering/Knowledge REF: 1486

KEY: Reproductive problems| patient education| pathophysiology

MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

SHORT ANSWER

1. Post transurethral resection of the prostate, a client has a three-way catheter with a continuous bladder irrigation. Over the last 12 hours, there has been 1400 mL of irrigation solution infused and 2000 mL measured in output from the drainage bag. What is the recording of the urinary output for the 12-hour period? (*Record your answer using a whole number.*) ____ mL

ANS:

600 mL

2000 mL from the drainage bag (including both the irrigation fluid and urine) minus the 1400 mL of irrigation fluid equals 600 mL of urine: 2000 mL 1400 mL = 600 mL.

DIF: Applying/Application REF: 1491

KEY: Reproductive problems| nursing intervention| fluid and electrolyte balance

MSC: Integrated Process: Nursing Process: Analysis

NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

Chapter 73: Care of Transgender Patients

MULTIPLE CHOICE

1. A nurse is reviewing the chart of a new client in the family medicine clinic and notes the client is identified as George Smith. The nurse enters the room and finds a woman in a skirt. What action by the nurse is best?
a. Apologize and declare confusion about the client.
b. Ask Mrs. Smith where her husband is right now.
c. Ask the client about preferred forms of address.
d. Explain that the chart must contain an error.

ANS: C
The nurse may encounter transgender clients whose outward appearance does not match their demographic data. In this case, the nurse should greet the client and ask the client to explain his or her preferred forms of address. Lengthy apologies can often create embarrassment. The nurse should not assume the client is not present in the room. The chart may or may not contain errors, but that is not related to determining how the client prefers to be addressed.

DIF: Understanding/Comprehension REF: 1496
KEY: LGBTQ| therapeutic communication
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Psychosocial Integrity

2. A nurse is providing health teaching to a middle-aged male-to-female (MtF) client who has undergone gender reassignment surgery. What information is most important to this client?
a. Be sure to have an annual prostate examination.
b. Continue your normal health screenings.
c. Try to avoid being around people who are ill.
d. You should have an annual flu vaccination.

ANS: A
The MtF client retains the prostate, so annual screening examinations for prostate cancer remain important. The other statements are good general health teaching ideas for any client.

DIF: Applying/Application REF: 1496
KEY: LGBTQ| health screening| male reproductive problems
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

3. A transgender client is taking transdermal estrogen (Climara). What assessment finding does the nurse report immediately to the provider?
a. Breast tenderness
b. Headaches
c. Red, swollen calf
d. Swollen ankles

ANS: C
A red, swollen calf could be a manifestation of a deep vein thrombosis, a known side effect of estrogen. The nurse reports this finding immediately. The other manifestations are also side effects of estrogen, but do not need to be reported as a priority.

DIF: Applying/Application REF: 1497
KEY: LGBTQ| venous thromboembolism| estrogens| nursing assessment
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A transgender client taking spironolactone (Aldactone) is in the internal medicine clinic reporting heart palpitations. What action by the nurse takes priority?
a. Draw blood to test serum potassium.

b. Have the client lie down.
c. Obtain a STAT electrocardiogram (ECG).
d. Take a set of vital signs.

ANS: C
Spironolactone is a potassium-sparing diuretic, and hyperkalemia can cause cardiac dysrhythmias. The nurses priority is to obtain an ECG, then to facilitate a serum potassium level being drawn. Having the client lie down and obtaining vital signs are also important care measures, but do not take priority.

DIF: Applying/Application REF: 1498
KEY: LGBTQ| electrolyte imbalances
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

5. The nurse is teaching a transgender client about the medication goserelin (Zoladex). What action by the client indicates good understanding?
a. Takes a manual blood pressure
b. Administers a subcutaneous injection
c. Prepares an implanted port for IV insertion
d. States that the axillary area will be clothed

ANS: B
Goserelin is administered via subcutaneous injection. The other actions are not related to self-management while on this medication.

DIF: Evaluating/Synthesis REF: 1498
KEY: LGBTQ| medication administration| patient education
MSC: Integrated Process: Nursing Process: Evaluation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A client is preparing for gender reassignment surgery and will transition from male to female. The client is worried about the voice not sounding feminine enough. What action by the nurse is best?
a. Ask if the client has considered vocal cord surgery to change the voice.
b. Refer the client for vocal therapy with speech-language pathology.
c. Teach the client that there will be no effect on the clients voice.
d. Tell the client that the use of hormones will eventually change the voice.

ANS: B
Male-to-female clients can consult with a speech-language pathologist for vocal training to help with intonation and pitch. While vocal surgery is possible, it may not be the best first option due to cost and invasiveness. Telling the client there will be no change to the voice does not give the client information to address the concern. While the hormones this client is taking will not affect the voice, simply stating that fact does not help the client manage this issue.

DIF: Applying/Application REF: 1498
KEY: LBGTQ| referrals| communication
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

7. A client has returned from the postanesthesia care unit after a vaginoplasty. What comfort measure does the nurse provide for this client?
a. Apply ice to the perineum.
b. Elevate the legs on pillows.
c. Position the client on the left side.
d. Raise the head of the bed.

ANS: A
Ice is applied to the perineum to reduce pain and discomfort. Elevating the legs on pillows is not recommended after a lengthy procedure in the lithotomy position, which predisposes the client to venous thromboembolism.

Positioning the client on the left side and raising the head of the bed are not comfort measures related to this procedure.

DIF: Understanding/Comprehension REF: 1500
KEY: LGBTQ| comfort measures| postoperative nursing
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

8. A client had a vaginoplasty under epidural anesthetic. Which action by the nurse is most important?
a. Ensure that the urinary catheter is securely attached to the leg.
b. Instruct the client not to try to get out of bed unassisted.
c. Monitor the clients dressings and wound drainage.
d. Position the Jackson-Pratt drain to the contralateral side.

ANS: B
Epidural anesthesia will cause the client to not be able to move (or feel) the legs for several hours. It is important for client safety that adequate help is available prior to this client trying to get out of bed. Securing the catheter to the leg and monitoring dressings and drainage are important for any client after surgery. Positioning the drain to the contralateral side is not needed.

DIF: Applying/Application REF: 1500
KEY: LGBTQ| postoperative nursing| epidural anesthesia| patient safety
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

9. After a vaginoplasty, what instruction by the nurse is most important?
a. Avoid vaginal douching to prevent infection.
b. Do not have sexual intercourse for at least 6 months.
c. Use oil-based lubricants with the vaginal dilators.
d. You must dilate the vagina several times a day for months.

ANS: D
Self-care management for this client includes instructions to dilate the new vagina several times a day for months after the procedure, using water-based lubricant. The client also needs to douche regularly, especially after intercourse, to avoid infections. Sexual intercourse is another way to keep the vagina dilated.

DIF: Understanding/Comprehension REF: 1500
KEY: LGBTQ| patient education MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

MULTIPLE RESPONSE

1. The nurse is reviewing possible complications from a phalloplasty. What factors does the nurse include? (Select all that apply.)
a. Infection of donor site
b. Necrosis of the neopenis
c. Rectal perforation
d. Urinary tract stenosis
e. Vaginal infections

ANS: A, B, D
Complications from phalloplasty include infection or scarring of the donor site, necrosis, and stenosis of the urinary tract. Rectal perforation can occur with vaginoplasty, as can infections.

DIF: Understanding/Comprehension REF: 1501
KEY: LGBTQ| postoperative nursing| patient education
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

2. A student nurse is learning about the health care needs of lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) clients. Which terms are correctly defined? (Select all that apply.)
a. Gender dysphoria Distress caused by incongruence between natal sex and gender identity
b. Gender queer A label used when gender identity does not conform to male or female
c. Natal sex The sex one is born with or is assigned to at birth
d. Transgender A person who dresses in the clothing of the opposite sex
e. Transition The time between questioning and establishing a sexual identity

ANS: A, B, C
Gender dysphoria is emotional distress caused by the incongruence between natal sex (sex assigned at birth) and gender identity. Gender queer is a label sometimes used by people whose gender identity does not fit the established categories of male or female. Natal sex describes the gender a person is born with or is assigned to at birth. Transgender is an adjective to describe a person who crosses or transcends culturally defined categories of gender. Transition is the period of time when transgender individuals change from the gender role associated with their sex to a different gender role.

DIF: Remembering/Knowledge REF: 1493
KEY: LGBTQ
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Psychosocial Integrity

3. A nurse works with many transgender clients. What routine monitoring is important for the nurse to facilitate in this population? (Select all that apply.)
a. Lipid profile
b. Liver function tests
c. Mammograms if breast tissue is present
d. Prostate-specific antigen (PSA) for natal males
e. Renal profile

ANS: A, B, C, D
Common routine monitoring for this population includes lipid and liver panels, mammograms if any breast tissue is present, and PSA for natal males as the prostate is not removed during a vaginoplasty/penectomy. Renal profiles are not required based on treatment options for this population.

DIF: Remembering/Knowledge REF: 1497
KEY: LGBTQ| health screening
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

Chapter 74: Care of Patients with Sexually Transmitted Diseases

MULTIPLE CHOICE

1. A nurse instructor is teaching a student nurse about the factors that have increased the number of people with sexually transmitted diseases (STDs) seen in practice. Which statement by the student indicates a lack of understanding?
a. There are improved techniques to diagnose an STD used in practice.
b. There is increased incidence of sexual abuse and sexual trafficking.
c. Females feel safe using oral agents rather than a condom as contraception.
d. The organisms causing STDs are all becoming more virulent.

ANS: D
There is no evidence that the organisms that cause STDs are becoming more virulent, but a client may need to use another anti-infective if allergic or the protocol was not effective. Extensive histories are taken in the clinic of clients of all ages, as well as assessment of laboratory data such as cervical, urethral, oral, or rectal specimens and lesion samples for microbiology and virology. There are changes in sexual attitudes and practices, cultural factors, migration, and international travel. Women often think that the oral contraceptives protect them from an STD.

DIF: Applying/Application REF: 1505
KEY: Reproductive problems| evidence-based practice| teaching| secondary prevention
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

2. A nurse is assessing a client who presents with a scaly rash over the palms and soles of the feet and the feeling of muscle aches and malaise. The nurse suspects syphilis. Which action by the nurse is appropriate?
a. Reassure the client that this stage is not infectious unless she is pregnant.
b. Assess the client for hearing loss and generalized weakness.
c. Don gloves and further assess the clients lesions.
d. Take a history regarding any cardiovascular symptoms.

ANS: C
The client is displaying symptoms similar to secondary syphilis, with flu-like symptoms and rash due to the spirochetes circulating throughout the bloodstream. Therefore, the nurse needs to further assess the clients lesions with gloves since the client is highly contagious at this stage. Late latent syphilis is not infectious except to a fetus. Tertiary syphilis may display in the form of cardiovascular or central nervous system symptoms.

DIF: Applying/Application REF: 1506
KEY: Reproductive problems| secondary prevention| nursing assessment| Standard Precautions MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

3. A male client is diagnosed with primary syphilis. Which question by the nurse is a priority at this time?
a. Have you been using latex condoms?
b. Are you allergic to penicillin?
c. When was your last sexual encounter?
d. Do you have a history of sexually transmitted disease?

ANS: B
Benzathine penicillin G is the evidence-based treatment for primary syphilis. The client needs to be assessed for allergies before treatment. The other questions would be helpful in the clients history of sexually transmitted diseases but not as important as knowing whether the client is allergic to penicillin.

DIF: Applying/Application REF: 1507
KEY: Reproductive problems| patient safety| secondary prevention
MSC: Integrated Process: Nursing Process: Assessment

NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

4. An African-American female with blisters on the vagina is being treated with acyclovir (Zovirax) for genital herpes. She is angry at her partner for transmitting the infection. Which action by the nurse is best?
a. Encourage the client to engage in sexual activity since she is on medication.
b. Be sensitive to the clients feelings and refer her to a support group.
c. Reinforce that the disease can no longer be spread to other partners.
d. Reassure the client that sexual activity will not be painful while on acyclovir.

ANS: B
The nurse needs to be sensitive and supportive of the client since infected clients may feel angry, lonely, and isolated. Allow the client to verbalize her feelings and refer her to a local support group, such as the National Herpes Resource Center. Sexual activity should not occur while the lesions are present because of discomfort and viral transmission. Genital herpes is an incurable viral disease, and the antiviral drugs minimize the infection but do not cure it. Condoms should be used to avoid the spread of the disease.

DIF: Applying/Application REF: 1510
KEY: Antiviral medication| reproductive problems| caring| infection control
MSC: Integrated Process: Caring
NOT: Client Needs Category: Psychosocial Integrity

5. A 19-year-old female is asking the nurse about the vaccine for human papilloma virus (HPV). Which statement by the nurse is accurate?
a. Gardasil protects against all HPV strains.
b. You are too young to receive the vaccine.
c. Only females can receive the vaccine.
d. This will lower your risk for cervical cancer.

ANS: D
Gardasil is used to provide immunity for HPV types 6, 11, 16, and 18 that are high risk for cervical cancer and warts. The vaccine is recommended for people ages 10 to 26 years.

DIF: Remembering/Knowledge REF: 1512
KEY: Reproductive problems| antiviral medications| infection| cancer
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

6. A 26-year-old client with multiple sexual partners is being assessed for symptoms of dysuria and vaginal discharge. Because the results from the culture of the cervical cells are not available, the client will be treated for both Chlamydia and gonorrhea. Which explanation by the nurse is best?
a. This early treatment will prevent obstruction to the fallopian tubes.
b. Only azithromycin (Zithromax) is prescribed for both sexually transmitted diseases.
c. The treatment will prevent aortic valve disease and aneurysms.
d. Oral antibiotic treatment will prevent frequent occurrences of meningitis.

ANS: A
Both gonorrhea and Chlamydia can cause pelvic inflammatory disease and scarring of the fallopian tubes, resulting in infertility problems. Azithromycin is the treatment of choice for both sexually transmitted diseases, but ceftriaxone (Rocephin) is also recommended for treatment of gonorrhea. Aortic valve disease and aneurysms usually occur with tertiary syphilis. Meningitis occurs rarely with a gonorrhea infection and is usually treated with intravenous antibiotic therapy in the hospital setting.

DIF: Applying/Application REF: 1515
KEY: Reproductive problems| infection| antibiotics
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

7. While evaluating a male client for treatment of gonorrhea, which question is the most important for the nurse to ask?

a. Do you have a history of sexually transmitted disease?
b. When was your last sexual encounter?
c. When did your symptoms begin?
d. What are the names of your recent sexual partners?

ANS: D
Sexual partners, as well as the client, should be tested and treated for gonorrhea. Asking about sexually transmitted disease history, last sexual encounter, and onset of symptoms would be helpful with the history taking, but the priority is treating the clients sexual partners to limit the spread of the disease.

DIF: Applying/Application REF: 1513
KEY: Reproductive problems| health promotion| infection
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

8. Before marriage, a female client has a blood test drawn for syphilis. The test reveals a positive Venereal Disease Research Laboratory (VDRL) serum test. What is the advice that the nurse should give the client?
a. Check with your future husband about his sexual activity.
b. You must determine if you are pregnant at this time.
c. Submit to a more specific treponemal test to confirm the infection.
d. Agree to a benzathine penicillin G injection in multiple doses.

ANS: C
False-positive reactions can occur with viral infections, hepatitis, and systemic lupus erythematosus. A health care provider can request more specific treponemal tests such a fluorescent treponemal antibody absorption or microhemagglutination assay for Treponema palladium performed by the laboratory. While it would be good to confirm sexual activity with her future husband, this inquiry could wait until after further testing is performed. Penicillin is the treatment of choice, but as a single 2.4-million-unit dose. A different regimen would be recommended if the client were pregnant.

DIF: Applying/Application REF: 1508
KEY: Reproductive problems| infection| health screening
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

9. A 23-year-old female has been diagnosed with genital warts. Which action by the nurse is best?
a. Encourage the client to have an annual Papanicolaou (Pap) test.
b. Recommend an over-the-counter wart treatment for genital tissue.
c. Report the case to the Centers for Disease Control and Prevention (CDC).
d. Discuss popular options for contraception.

ANS: A
An annual Pap test is recommended (due the strong relationship between genital warts and the development of dysplasia of the cervix) until three normal Pap smears are obtained. The Pap smear can detect any malignancies of the cervix. Prescribed cream or gel such as podofilox (Condylox) is the recommended treatment, but not over-the-counter treatments. Genital warts, or condylomata acuminata, do not have to be reported to the CDC in all states. Pregnancy is not contraindicated with genital warts.

DIF: Applying/Application REF: 1511
KEY: Reproductive problems| nursing interventions| infection
MSC: Integrated Process: Nursing Process: Implementation
NOT: Client Needs Category: Health Promotion and Maintenance

10. A female client returned to the clinic with a yellow vaginal discharge after being treated for Chlamydia infection 3 weeks ago. Which statement by the client alerts the nurse that there may be a recurrence of the infection?
a. I did practice abstinence while taking the medication.
b. I took doxycycline two times a day for a week.
c. I never told my boyfriend about the infection.

d. I did drink wine when taking the medication for Chlamydia.

ANS: C
There is a good possibility that the boyfriend re-infected the client after the medication regimen was finished. Both the client and the boyfriend need to be treated. The other statements were in compliance with the recommendations of abstinence and the usual medication regimen with doxycycline. Wine should not interfere with the treatment.

DIF: Applying/Application REF: 1513
KEY: Reproductive problems| infection
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

11. A woman is admitted to the hospital for antibiotic therapy for pelvic inflammatory disease. She is in pain, with a rating of 7 on a scale of 0 to 10. What comfort measure can the nurse delegate to the unlicensed assistive personnel (UAP)?
a. Administer Tylenol #3 immediately.
b. Apply a heating pad to the lower abdomen.
c. Position the client in a semi-Fowlers position.
d. Teach the client to increase intake of fluids.

ANS: C
The client with pelvic inflammatory disease usually experiences lower abdominal tenderness. The UAP can position the client. Only the nurse can administer medications, initially apply heat to the clients abdomen, and perform teaching.

DIF: Applying/Application REF: 1517
KEY: Reproductive problems| pain| comfort measures| unlicensed assistive personnel (UAP) MSC: Integrated Process: Caring
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

12. A client with pelvic inflammatory disease is seen by the nurse 72 hours after starting oral antibiotics. Which finding leads the nurse to take immediate action?
a. Feelings of anger that her partner infected her
b. Loose stools over the last 2 days
c. Anorexia and nausea
d. Chills and a temperature of 101 F

ANS: D
Chills and fever could indicate a persistent infection and the immediate need to alter the dose or type of antibiotic. Anger is a normal reaction to a sexually transmitted disease and the pain of pelvic inflammatory disease. Gastrointestinal symptoms are common side effects of antibiotics but not an immediate cause for intervention.

DIF: Applying/Application REF: 1516
KEY: Reproductive problems| infection| nursing assessment
MSC: Integrated Process: Nursing Process: Assessment
NOT: Client Needs Category: Physiological Integrity: Physiological Adaptation

13. A 19-year-old college student seeks information from the schools nurse about how to avoid sexually transmitted diseases (STDs) without abstinence as a choice. Which statement by the nurse is best?
a. Urinating after intercourse will eliminate the risk of infection.
b. A vaccine can prevent genital warts caused by some strains of the human papilloma virus (HPV).
c. Oral contraception can prevent pregnancy and STDs.
d. Good handwashing helps prevent infection associated with STDs.

ANS: B
Gardasil is used to provide immunity for HPV types 6, 11, 16, and 18 that are high risk for cervical cancer and genital warts. While there is some truth that urination after intercourse may decrease the risk of infection by

flushing out organisms, it does not eliminate the risk of contaminating bacteria traveling up the urethra. The other statements are not accurate.

DIF: Applying/Application REF: 1512
KEY: Reproductive problems| patient teaching| infection| safer sexual practices
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Safe and Effective Care Environment: Management of Care

14. The nurse teaches a client with genital herpes about effective comfort measures. Which statement by the client indicates a need for further teaching by the nurse?
a. I can apply warm towels or ice packs to the lesions.
b. Sitz baths three times a day may help ease the pain.
c. I understand there are anesthetic sprays and ointments.
d. I really should try to limit urination due to the pain.

ANS: D
The client should urinate frequently, not limit voiding. Voiding while in the shower or tub should lessen the discomfort. Warm compresses, ice packs, sitz baths, and anesthetic sprays and ointments are all effective comfort measures that can be used with genital herpes.

DIF: Remembering/Knowledge REF: 1510
KEY: Reproductive problems| pain| comfort measures
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Basic Care and Comfort

MULTIPLE RESPONSE

1. A primary care clinic sees some clients with sexually transmitted diseases. Which clients would the nurse be required to report to the local authority in every state, according to the Centers for Disease Control and Prevention? (Select all that apply.)
a. Client with Chlamydia
b. Woman with gonorrhea
c. Man with syphilis
d. Client with human immune deficiency virus
e. Female with pelvic inflammatory disease

ANS: A, B, C, D
Chlamydia, gonorrhea, syphilis, chancroid, human immune deficiency virus (HIV), and acquired immune deficiency syndrome (AIDS) are all reportable to local authorities in every state. Pelvic inflammatory disease does not need to be reported.

DIF: Remembering/Knowledge REF: 1505
KEY: Reproductive problems| infection control| secondary prevention
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Safe and Effective Care Environment: Safety and Infection Control

2. A nurse wants to reduce the risk potential for transmission of chlamydia and gonorrhea with a female client diagnosed with both diseases. Which items should be included in the clients teaching plan? (Select all that apply.)
a. Expedited partner therapy
b. Abstinence until therapy is completed
c. Use of internal uterine devices
d. Proper use of condoms
e. Re-screening for infection
f. Use of oral contraception

ANS: A, B, D, E
As part of client/partner education, the nurse should explain the expedited partner therapy (practice of treating both sexual partners by providing medication to the client for the partner). The nurse should also emphasize the

need for abstinence from sexual intercourse until treatment is finished, proper use of condoms, and re-screening for re-infection 3 to 12 months after treatment. The use of an intrauterine device and oral contraception is not part of the plan.

DIF: Applying/Application REF: 1513
KEY: Reproductive problems| infection| patient-centered care
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Reduction of Risk Potential

3. A client being treated for syphilis visits the office with a possible allergic reaction to benzathine penicillin G. Which abnormal findings would the nurse expect to document? (Select all that apply.)
a. Red rash
b. Shortness of breath
c. Heart irregularity
d. Chest tightness
e. Anxiety

ANS: A, B, D, E
The nurse should keep all clients at the office for at least 30 minutes after the administration of benzathine penicillin G. Allergic manifestations consist of rash, shortness of breath, chest tightness, and anxiety, depicting anaphylaxis and serum sickness. Heart irregularity is not seen as an allergic manifestation.

DIF: Remembering/Knowledge REF: 1508
KEY: Reproductive problems| antibiotics| allergic reaction
MSC: Integrated Process: Communication and Documentation
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. Which risk factors would the nurse teach a 23-year-old client about to prevent pelvic inflammatory disease (PID)? (Select all that apply.)
a. Having multiple sexual partners
b. Using an intrauterine device (IUD)
c. Smoking
d. Drinking two alcoholic beverages per day
e. Having a history of sexually transmitted diseases (STDs)

ANS: A, B, C, E
Some of the same factors that place women at risk for STDs also place women at risk for PID: sexually active women of age younger than 26 years, multiple sexual partners, use of an IUD, smoking, and a history of STDs. Alcohol consumption does not impact a womans risk for PID.

DIF: Remembering/Knowledge REF: 1516
KEY: Reproductive problems| primary survey| safer sexual practices
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Health Promotion and Maintenance

5. The nurse is teaching a client who is taking an oral antibiotic for treatment of a sexually transmitted disease (STD). Which statements by the client indicate a correct understanding of the treatment? (Select all that apply.)
a. I need to drink at least 8 glasses of fluid each day with my antibiotic.
b. I should read the instructions to see if I can take the medication with food.
c. Antacids should not interfere with the effectiveness of the antibiotic.
d. I need to wait 7 days after the last dose of the antibiotic to engage in intercourse.
e. It should not matter if I skip a couple of doses of the antibiotic.

ANS: A, B, D
When a client is being treated with an oral antibiotic for an STD, 8 to 10 glasses of fluid should be routine, medication instructions should be reviewed, and at least a week break should occur between the last dose of the antibiotic and sexual intercourse to allow for the medications full effects. Use of antacids and missing doses could decrease the effectiveness of the antibiotic.

DIF: Remembering/Knowledge REF: 1517
KEY: Reproductive problems| antibiotics| medication adherence
MSC: Integrated Process: Teaching/Learning
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

SHORT ANSWER

1. A 23-year-old female was admitted to the hospital for intravenous antibiotic treatment of pelvic inflammatory disease. The provider has ordered cefazolin (Ancef) to be administered every 8 hours. At what rate should the nurse infuse the medication if the pharmacy provides 1 g of the medication in 50 mL of 0.9% NaCl to infuse in 30 minutes? (Record your answer using a whole number.) _____ mL/hr

ANS:
100 mL/hr
To calculate using the dimensional analysis method: (50 mL/30 min) (60 min/1 hr) = 100 mL/hr.

DIF: Applying/Application REF: 1519
KEY: Reproductive problems| drug calculation| antibiotics
MSC: Integrated Process: Nursing Process: Analysis
NOT: Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies