

Answers

CHAPTER 12 NURSING CARE OF PATIENTS HAVING SURGERY

AUDIO CASE STUDY

Alan and the Surgical Patient

1. Put name bracelet on, remove underwear as necessary, remove nail polish, remove jewelry (or tape wedding ring in place if surgery is not on extremity), remove dentures, send hearing aid and glasses with patient, record vital signs, and verify that informed consent, diagnostic tests results, and history and physical are completed and in the medical record.
2. Places the bed in its lowest position, locks the wheels, and raises the side rails for safety.
3. Alan does the following:
 - Informs patient of call button location and advises her to call if she needs something.
 - Informs the patient her call will be answered promptly.
 - Reminds the patient not to try to get up alone, as she might be dizzy or weak and fall.
 - Informs the patient that he will be checking on her frequently.
 - Assists the patient to sit on the side of the bed to dangle her legs prior to standing.
 - Puts slippers on the patient for nonslip footing.
4. Early ambulation, coughing and deep-breathing exercises, and leg exercises.
5. **S:** Mrs. Spring returned to her room after an exploratory laparotomy today.
B: Mrs. Spring had abdominal pain and was scheduled for an exploratory laparotomy.
A: Sleeping but arousable. Alert. Stable vital signs. Analgesic $\times 2$. Voided per commode. Performed coughing and deep-breathing and leg exercises.
R: Monitor vital signs, incision, pain level, intake and output. Provide pain management. Ambulate. Continue other exercises to prevent complications.

VOCABULARY

Sample sentences will vary for the Vocabulary problems.

1. Surgeons
2. perioperative

3. preoperative
4. intraoperative
5. postoperative
6. Induction
7. adjunct
8. dehiscence
9. Anesthesiologists
10. Anesthesia
11. Atelectasis
12. Debridement
13. Hypothermia
14. Evisceration
15. anesthetist

SURGERY URGENCY LEVELS

1. (4)
2. (3)
3. (3)
4. (4)
5. (2)
6. (1)
7. (2)
8. (1)
9. (3)
10. (1)

COMPLICATION PREVENTION

1. True.
2. False. The surgeon determines if the anticoagulant therapy is to be stopped several days before surgery, which it often is.
3. True.
4. False. The surgeon and patient must mark the site before surgery begins.
5. False. Circulatory collapse can develop if steroids are stopped abruptly.
6. False. An indwelling urinary catheter can be a source of infection. Usually it should be removed by postoperative day 2, as ordered.
7. False. Intermittent pneumatic compression devices are used to prevent blood clots.
8. True.
9. True.
10. True.

PERIOPERATIVE NURSING DIAGNOSES AND OUTCOMES

1. Will state reduced anxiety before surgery.
2. Will demonstrate understanding of surgical information and routines before surgery.
3. Will remain free from injury.
4. Will report pain is relieved to satisfactory level within 30 minutes of report of pain.
5. Will remain free from infection at all times.

PRIORITIZATION

Prioritization and Rank: B, D, A, C

Rationale

Patient B could be hemorrhaging from the tonsillectomy since intake was a clear liquid and not red to tinge the emesis. Prompt notification of the health-care provider (HCP) is a priority to identify hemorrhage, provide treatment, and prevent shock.

Patient D's urine should be inspected to ensure that the amount of bleeding is not greater than what is expected after a cystoscopy. If the bleeding is heavier than tinging the urine, the HCP should be informed, as the patient could be hemorrhaging.

Patient A requires coordination with an outside agency, which may take time to complete. The process should be started now so the patient can be discharged on time.

Patient C's ambulation can be delegated to the nursing assistant. Then later the discharge instructions can be reviewed.

CRITICAL THINKING AND CLINICAL JUDGMENT

1. For nursing interview, diagnostic testing, anesthesia interview, and preoperative teaching to ensure the patient is in the best possible condition for surgery.
2. Laboratory tests, including blood glucose, creatinine, blood urea nitrogen (BUN), electrolytes, complete blood count (CBC), international normalized ratio (INR)/prothrombin time (PT), partial thromboplastin time (PTT), bleeding time, type and screen, and urinalysis; oxygen saturation, electrocardiogram (ECG), and chest x-ray.
3. Explain what is to be done in preadmission testing; preadmission prep: bathing, scrubs, preps, medications, nil per os (NPO) time, no nail polish or makeup; admission procedures the day of surgery: registration, nursing unit, emotional support, consent for care signed, preoperative checklist; intravenous (IV) line insertion, medications, surgery, perianesthesia care unit (PACU) and family waiting locations, surgery time frames; and postoperative care: pain control, deep breathing and coughing, leg exercises, activity, leg abduction.
4. Explain admission procedures to patient and families; verify informed consent has been signed and preoperative checklist is completed; insert IV; and administer ordered medications. Review postoperative expectations.
5. Greets the patient; verifies patient's name, age, and allergies; verifies the surgeon performing the surgery, that consent has been given, and the surgical procedure, especially right or left when applicable; confirms medical history; answers questions; and alleviates anxiety. Explains what to expect in surgery (e.g., "The room may feel cool, but you can request extra blankets"; "There is a lot of equipment, including a table and large bright overhead lights"; "Several health-care team members will introduce themselves to you"; "The surgeon will greet you").
6. Licensed practical nurses/licensed vocational nurses (LPN/LVNs) can scrub in for surgery to hand instruments to the surgeon. The LPN/LVN must know sterile technique, surgical instruments, and the medications placed in the sterile field for use during surgery.
7. Maintain the patient's airway and ensure patient safety to prevent injury while the patient emerges from anesthesia and becomes alert and oriented per their baseline.
8. Pain control is essential to prevent physiological harm to the patient and to ensure that the patient can participate in recovery activities, such as deep breathing and coughing, and physical activity. Deep breathing and coughing and incentive spirometer use prevent atelectasis and pneumonia. Leg exercises and ambulation prevent thrombophlebitis.

REVIEW QUESTIONS

*The correct answers are in **boldface**.*

1. **(3)** is correct. The LPN/LVN can offer emotional support as needed to patients and families. (1) is the role of the registered nurse. (2, 4) are the roles of the health-care provider.
2. **(4)** is correct. The nurse witnesses the patient's signature to verify that it was the patient who signed the consent after informed consent was provided by the health-care provider. (1, 2, 3) are not the role of the nurse and are not indicated by the witnessing of the consent.
3. **(2)** is correct. Patient is kept free from all forms of accidental injuries. Sources of injury can include equipment, chemical, and electrical hazards; errors in patient and surgical site identification; and pressure injuries. (1, 3, 4) are preoperative outcomes.
4. **(2, 3, 4, 5)** are correct. To be discharged from the perianesthesia care unit, temperature must be in normal range, vital signs must be in normal range and stable, there can be no excessive bleeding, and patient must be awake. (1) Oxygen saturation must be above 90%.
5. **(3, 5, 6)** are correct. The patient and a responsible adult must understand discharge instructions before discharge, which include an order to rest for 24 to 48 hours. (1) Patients cannot drive home. (2) Patient does not need to have a landline phone at home but must be able to be contacted in some way for follow-up. (4) Intravenous opioids cannot have been given less than 30 minutes prior to discharge.
6. **(2)** is correct. The registered nurse and the surgeon must be notified. (1, 3, 4) are not appropriate interventions. If the patient is extremely scared, the surgeon must be told because surgery may need to be canceled.

7. (1, 5) are correct. Higher steroid levels are needed during stress to the body, which surgery produces, to prevent circulatory collapse. (2, 3, 4) are not complications of steroid withdrawal.
8. (1, 2, 3) are correct. The patient may require more time to reply or provide a return demonstration of teaching. Learning will not occur if the patient is not ready to learn. Allow the patient to learn one thing before moving to the next topic to prevent overwhelming the patient. (4) A low tone is best heard if any hearing impairment exists. (5) Red, orange, and yellow colors are seen best. (6) Use simple, understandable terms.
9. (3, 5, 6) are correct. Pneumonia can be prevented with lung expansion promoted by ambulation. Leg movement prevents venous stasis and blood clots. Ambulation helps promote bowel function. (1, 2, 4) are not prevented with ambulation.
10. (2) is correct. Use two people to assist the patient for the first time in case the patient is light-headed or dizzy. (1) One person may not be enough to support the patient if fainting occurs. (3) The patient should rise slowly to prevent dizziness and falls. (4) Analgesics should be given about 1 hour before ambulation so the patient is comfortable but hypotension is less likely.
11. (3) is correct. Presence of flatus occurs with normal bowel function. (1, 4) indicate the bowel is not functioning normally. (2) is not related to bowel function.
12. (3) is correct. First, have the patient lie down to reduce pressure on the incisional area to help prevent evisceration. (1) The goal is to prevent evisceration, so the surgeon would be notified either simultaneously as the nurse is assisting the patient to lie down or immediately after the patient is lying down and the abdomen is covered. (2) The focus is ensuring the patient's safety. As you move to assist the patient, ask the family to step out of the room briefly to provide more room to work and to limit contact with others until the abdomen is covered. Explain you will provide explanations to them after the other actions have been completed. (4) This would be done immediately after the patient is lying down to protect the incisional area.
13. (4) is correct. Exhaling to reach target is incorrect and would indicate the need for additional teaching. (1, 2, 3) are appropriate ways to use the spirometer.
14. (2, 5) are correct. New-onset fever occurring shortly after surgery is often due to atelectasis (a new infection related to surgery would take longer to develop). Encouraging deep breathing and coughing and ambulating to expand lungs can help prevent pneumonia. (1) An infection is not usually the cause of a fever in this time frame so antibiotics are not usually indicated. (3) Tylenol is not necessary for a low-grade fever, which is part of the body's defense system. It will not help atelectasis unless it is part of the pain management regimen to ensure the patient is not painful and willing to expand the lungs with deep breathing and coughing. (4) Fluid intake should be maintained to help thin lung secretions. (6) Output should be monitored routinely but will not help reduce the risk of a postoperative respiratory complication.
15. The incentive spirometer helps prevent atelectasis (complete or partial collapse of the lung or a lobe of the lung from deflation of or fluid in the alveoli due to hypoventilation or obstruction) postoperatively.

