

Answers

CHAPTER 46 NURSING CARE OF PATIENTS WITH MUSCULOSKELETAL AND CONNECTIVE TISSUE DISORDERS

AUDIO CASE STUDY

Alex and Osteomyelitis

1. Osteomyelitis.
2. Hand hygiene and use of sterile technique for dressing changes.
3. Analgesics.

VOCABULARY

Sample sentences will vary for the Vocabulary problems.

1. Arthritis
2. Arthroplasty
3. Synovitis
4. Arthrocentesis
5. Hyperuricemia
6. Vasculitis
7. Avascular necrosis
8. Replantation
9. Hemipelvectomy
10. Fasciotomy
11. Osteosarcoma
12. Osteomyelitis

FRACTURES

1. (10)
2. (1)
3. (9)

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

PROSTHESIS CARE EDUCATION

1. False. New shoes should be the same height and the same type.
2. False. Clean with mild soap and water.
3. True
4. True
5. False. Grease the parts as instructed by the prosthetist.

HEALTH PROMOTION FOR PATIENTS WITH GOUT

1. stress
2. Avoid
3. fluids
4. aspirin, aspirin
5. Avoid
6. purine, sardines

PRIORITIZATION

(2, 5, 3, 1, 4) Transfer and positioning cast to prevent pressure points by palming the cast while moving it, placing it on a pillow, and leaving it uncovered to air dry is the initial priority; next, collect data of circulation, sensation, and mobility status to detect problems with extremity or cast that require prompt action; and then check vital signs to determine patient's stability before analgesic administration.

PLANNING CARE

NURSING DIAGNOSIS

Impaired Physical Mobility *related to hip precautions and surgical pain*

Interventions

- Reinforce hip precautions, and transfer and ambulation techniques.
- Monitor the patient for and take measures to prevent complications of immobility.
- Turn patient every 2 hours to the side ordered and check skin.
- Protect skin: Keep pressure off of heels, elbows and sacrum; use barrier cream for incontinence; provide adequate diet and hydration.
- Teach patient to deep breathe and cough every 2 hours while awake and/or use incentive spirometer every hour while awake.
- Apply thigh-high compression stockings and/or compression devices as ordered.
- Give anticoagulants as ordered.
- Provide analgesics as prescribed especially before movement or ambulation.
- Encourage the patient to practice leg exercises.
- Mobilize patient as soon as possible as prescribed.

Rationale

- Activity is restricted due to hip precautions and weight-bearing limitations.
- Immobility complications can occur in multiple body systems if preventive measures are not used.

Evaluation

- Does the patient transfer and ambulate as instructed by physical therapy?
- Is the patient free from complications of immobility?

CRITICAL THINKING AND CLINICAL JUDGMENT

1. Acute compartment syndrome, fat embolism, osteomyelitis, pulmonary embolism, pneumonia.
2. (a) Acute compartment syndrome, osteomyelitis; (b) fat embolism, pulmonary embolism
3. Neurovascular checks on the operative left leg, incision status, respiratory status, vital signs with temperature.
4. Coughing and deep breathing hourly while awake, early ambulation as ordered, ensuring adequate hydration, hand hygiene, sterile technique for dressing changes.
5. **C:** I am concerned that Mr. Selby is experiencing a complication of his fracture.
U: I am **un**comfortable with his condition, as he is exhibiting symptoms of fat emboli.
S: I am concerned for his safety, as I believe he is experiencing a life-threatening event and must be seen and treated immediately.

REVIEW QUESTIONS

The correct answers are in **boldface**.

1. **(3, 5)** is correct. It should be wrapped in a cool, moist cloth (sterile, if available) and sealed in a plastic bag. (1) It should be cool and moist. (2) It is not placed on dry ice which could freeze and damage it. (4) A sterile dressing is not likely to be readily available and the covering should be moist. (6) It is not placed in ice to avoid extreme temperatures that could damage it.
2. **(4)** is correct. An elevated serum uric acid level, which is a waste product resulting from the breakdown of proteins, occurs with gout. (1, 2, 3) are not involved in gout.
3. **(2)** is correct. Palming the cast to move it prevents indentations being made in the wet cast with fingertips. (1) A long leg plaster cast can be heavy and difficult to move alone, (3) Fingertips can make indentations in the wet plaster that can then become pressure points that injure the skin. (4) The cast must be moved to promote drying on all sides as well as for comfort of the patient.

4. (3, 5) are correct. Giving a test dose of gold is important to observe for an allergic reaction. The patient is monitored after the test dose for an allergic reaction. (1, 2, 4, 6) are not related to gold therapy.
5. (4) is correct. The morphine should be prepared so it is ready to give promptly when it can be given in 15 minutes; 4 mg should be given because the pain level is at the maximum and is occurring before the minimum ordered time interval. (1) Applying ice to the cast may be helpful. However, because the pain is at the maximum, it will not provide enough relief. (2) There are no abnormalities to report to the health-care provider at this time. (3) Removing the pillow may increase pain if swelling increases.
6. (4) is correct. This is a sign of hip dislocation. (1, 2, 3) are not signs of right hip dislocation.
7. (1, 2, 3, 6) are correct. They are not high-purine foods and can be eaten. (4, 5) are high in purines and should be avoided.
8. (1, 5, 6) are correct. They contain aspirin, which can cause an attack of gout. (2, 3, 4) do not contain aspirin.
9. (3, 5, 6) are correct. Agency protocol specifies pin care using aseptic technique. Monitor pin sites to detect infections. (1) The pins may need to be carefully touched for cleaning. (2) Agency protocol is followed for cleansing agent and frequency. (4) Never loosen the pins, as they are providing traction and the bones could move.
10. (2, 4, 5) are correct. Pathological fractures result from disease. (1, 3, 6) are not diseases.
11. (2, 4, 5) Hand hygiene, aseptic technique, and wearing sterile gloves to apply a new dressing are essential. (1, 3) are needed to protect the nurse only if there is potential wound drainage.
12. (1, 2, 4, 6) are correct. Weight-bearing exercise and weight training, intake of foods high in calcium, and calcium supplements help prevent osteoporosis. (3) Dark, green leafy vegetables are high in calcium and should be included in the diet. (5) Maintaining normal weight is important to reduce stress on joints to prevent osteoarthritis, not osteoporosis.
13. (1, 3, 4, 6) are correct. (2) It is given in morning upon arising. (5) Wait 30 minutes before giving other medication.
14. (2, 3, 5, 6) are correct. Further education is needed, as these all promote flexion of the hip, which would promote contracture development and prevent the use of a prosthesis. (1, 4) prevent contracture development and should be used.
15. (2) is correct. Maintaining ideal body weight will reduce wear and tear on the knee. (1, 3) are related to gout management. (4) Jogging would increase stress on the knee joints.
16. (1) is correct. Notify the HCP because the patient may be developing compartment syndrome, an emergency condition, that could result in the loss of the limb if not treated immediately. (2) This is inappropriate after surgery, and it is not a nursing intervention. (3) The leg should not be massaged after a fracture or surgery due to the risk of an embolus. (4) It would be too early to administer another dose of analgesic, and it would mask a symptom of a potential complication. The HCP should determine treatment for the pain.
17. (3) Maintain legs in abduction to prevent dislocation of the hip. (1) Leg adduction increases the risk of hip dislocation. (2) This is a position that is seen as a result of hip dislocation. (4) Less than 90-degree hip flexion prevents hip dislocation.
18. The most common location for pain and inflammation associated with gout are the great toes.

