# Musculoskeletal Disorders



It is impossible for a man to learn what he thinks he already knows.

-Epictetus

Musculoskeletal injuries and disorders are common. Many, such as fractures, result from accidents; others, such as osteoarthritis, osteoporosis, and joint replacement, are often associated with the aging process; and still others, such as amputation, may result as a complication of a specific disease process such as diabetes. Nurses must know how to assess these clients, when to notify the health-care providers, and how to carry out the proper procedures and administer the medications ordered.

# **KEYWORDS**

# **ABBREVIATIONS**

abduction Above-the-Knee Amputation (AKA) Activated Partial Thromboplastin Time (aPTT) avulsion collaborative Activities of Daily Living (ADLs) comminuted Below-the-Knee Amputation (BKA) compound Blood Pressure (BP) degenerative Computed Tomography (CT) Continuous Passive Motion (CPM) epiphyseal greenstick Erythrocyte Sedimentation Rate (ESR) Health-Care Provider (HCP) herniated nucleus pulposus Immediately (STAT) impacted laminectomy Intravenous (IV) oblique Intravenous Pyelogram (IVP) Magnetic Resonance Imaging (MRI) paresthesia pathologic Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) primary care Osteoarthritis (OA) prostheses Patient-Controlled Analgesia (PCA) rhinitis Rule Out (R/O) secondary care Total Hip Replacement (THR) Total Knee Replacement (TKR) tertiary care Unlicensed Assistive Personnel (UAP) When Required, as Needed (PRN)

# PRACTICE QUESTIONS

# **Degenerative/Herniated Disk Disease**

- 1. The nurse is caring for an elderly client diagnosed with a herniated nucleus pulposus of L4-5. Which scientific rationale explains the incidence of a ruptured disk in the elderly?
  - 1. The client did not use good body mechanics when lifting an object.
  - 2. There is an increased blood supply to the back as the body ages.
  - 3. Older clients develop atherosclerotic joint disease as a result of fat deposits.
  - 4. Clients develop intervertebral disk degeneration as they age.
- **2.** The 34-year-old male client presents to the outpatient clinic complaining of numbness and pain radiating down the left leg. Which further data should the nurse assess?
  - 1. Posture and gait.
  - 2. Bending and stooping.
  - 3. Leg lifts and arm swing.
  - 4. Waist twists and neck mobility.
- **3.** The occupational health nurse is preparing an in-service for a group of workers in a warehouse. Which information should be included to help prevent on-the-job injuries?
  - 1. Increase sodium and potassium in the diet during the winter months.
  - 2. Use the large thigh muscles when lifting and hold the weight near the body.
  - 3. Use soft-cushioned chairs when performing desk duties.
  - 4. Have the employee arrange for assistance with household chores.
- **4.** The occupational health nurse is planning health promotion activities for a group of factory workers. Which activity is an example of primary prevention for clients at risk for low back pain?
  - 1. Teach back exercises to workers after returning from an injury.
  - 2. Place signs in the work area about how to perform first aid.
  - 3. Start a weight-reduction group to meet at lunchtime.
  - 4. Administer a nonnarcotic analgesic to a client complaining of back pain.
- **5.** The client with a cervical neck injury as a result of a motor-vehicle accident is complaining of unrelieved pain after administration of a narcotic analgesic. Which alternative method of pain control is an independent nursing action?
  - 1. Medicate the client with a muscle relaxant.
  - 2. Heat alternating with ice applied by a physical therapist.
  - 3. Watch television or listen to music.
  - 4. Discuss surgical options with the health-care provider.
- **6.** The client diagnosed with cervical disk degeneration has undergone a laminectomy. Which interventions should the nurse implement?
  - 1. Position the client prone with the knees slightly elevated.
  - 2. Assess the client for difficulty speaking or breathing.
  - 3. Measure the drainage in the Jackson Pratt bulb every day.
  - 4. Encourage the client to postpone the use of narcotic medications.
- **7.** The client is 12-hours post–lumbar laminectomy. Which nursing interventions should be implemented?
  - 1. Assess ability to void and log roll the client every two (2) hours.
  - 2. Medicate with IV steroids and keep the bed in a Trendelenburg position.
  - 3. Place sandbags on each side of the head and give cathartic medications.
  - 4. Administer IV anticoagulants and place on O<sub>2</sub> at eight (8) L/min.

- **8.** The nurse is working with an unlicensed assistive personnel (UAP). Which action by the UAP warrants immediate intervention?
  - 1. The UAP feeds a client two (2) days postoperative cervical laminectomy a regular diet.
  - 2. The UAP calls for help when turning to the side a client who is post–lumbar laminectomy.
  - 3. The UAP is helping the client who weighs 300 pounds and is diagnosed with back pain to the chair.
  - 4. The UAP places the call light within reach of the client who had a disk fusion.
- **9.** The nurse is caring for clients on an orthopedic floor. Which client should be assessed first?
  - 1. The client diagnosed with back pain who is complaining of a "4" on a 1-to-10 scale.
  - The client who has undergone a myelogram who is complaining of a slight headache
  - 3. The client two (2) days post-disk fusion who has T 100.4, P 96, R 24, and BP 138/78.
  - 4. The client diagnosed with back pain who is being discharged and whose ride is here.
- **10.** The nurse is administering 0730 medications to clients on a medical orthopedic unit. Which medication should be administered first?
  - 1. The daily cardiac glycoside to a client diagnosed with back pain and heart failure.
  - 2. The routine insulin to a client diagnosed with neck strain and type 1 diabetes.
  - 3. The oral proton pump inhibitor to a client scheduled for a laminectomy this a.m.
  - 4. The fourth dose of IV antibiotic for a client diagnosed with a surgical infection.
- **11.** The nurse writes the problem of "pain" for a client diagnosed with lumbar strain. Which nursing interventions should be included in the plan of care? Select all that apply.
  - 1. Assess pain on a 1-to-10 scale.
  - 2. Administer pain medication PRN.
  - 3. Provide a regular bedpan for elimination.
  - 4. Assess surgical dressing every four (4) hours.
  - 5. Perform a position change by the log roll method every two (2) hours.
- **12.** The nurse working on a medical-surgical floor feels a pulling in the back when lifting a client up in the bed. Which should be the first action taken by the nurse?
  - 1. Continue working until the shift is over and then try to sleep on a heating pad.
  - 2. Go immediately to the emergency department for treatment and muscle relaxants.
  - Inform the charge nurse and nurse manager on duty and document the occurrence.
  - 4. See a private health-care provider on the nurse's off time but charge the hospital.

### **Osteoarthritis**

- **13.** The occupational health nurse is teaching a class on the risk factors for developing osteoarthritis (OA). Which is a modifiable risk factor for developing OA?
  - 1. Being overweight.
  - 2. Increasing age.
  - 3. Previous joint damage.
  - 4. Genetic susceptibility.
- **14.** The client is diagnosed with osteoarthritis. Which sign/symptom should the nurse expect the client to exhibit?
  - 1. Severe bone deformity.
  - 2. Joint stiffness.
  - 3. Waddling gait.
  - 4. Swan-neck fingers.

- **15.** The client diagnosed with OA is a resident in a long-term care facility. The resident is refusing to bathe because she is hurting. Which instruction should the nurse give the unlicensed assistive personnel (UAP)?
  - 1. Allow the client to stay in bed until the pain becomes bearable.
  - 2. Tell the UAP to give the client a bed bath this morning.
  - 3. Try to encourage the client to get up and go to the shower.
  - 4. Notify the family the client is refusing to be bathed.
- **16.** The client has been diagnosed with OA for the last seven (7) years and has tried multiple medical treatments and alternative treatments but still has significant joint pain. Which psychosocial client problem should the nurse identify?
  - 1. Severe pain.
  - 2. Body image disturbance.
  - 3. Knowledge deficit.
  - 4. Depression.
- **17.** The client diagnosed with OA is prescribed a nonsteroidal anti-inflammatory drug (NSAID). Which instruction should the nurse teach the client?
  - 1. Take the medication on an empty stomach.
  - 2. Make sure to taper the medication when discontinuing.
  - 3. Apply the medication topically over the affected joints.
  - 4. Notify the health-care provider if vomiting blood.
- **18.** Which client goal is most appropriate for a client diagnosed with OA?
  - 1. Perform passive range-of-motion exercises.
  - 2. Maintain optimal functional ability.
  - 3. Client will walk three (3) miles every day.
  - 4. Client will join a health club.
- **19.** To which member of the health-care team should the nurse refer the client diagnosed with OA who is complaining of not being able to get in and out of the bathtub?
  - 1. Physiatrist.
  - 2. Social worker.
  - 3. Physical therapist.
  - 4. Counselor.
- **20.** The nurse is discussing the importance of an exercise program for pain control to a client diagnosed with OA. Which intervention should the nurse include in the teaching?
  - 1. Wear supportive tennis shoes with white socks when walking.
  - 2. Carry a complex carbohydrate while exercising.
  - 3. Alternate walking briskly and jogging when exercising.
  - 4. Walk at least 30 minutes three (3) times a week.
- **21.** The HCP prescribes glucosamine and chondroitin for a client diagnosed with OA. What is the scientific rationale for prescribing this medication?
  - 1. It will help decrease the inflammation in the joints.
  - 2. It improves tissue function and retards breakdown of cartilage.
  - 3. It is a potent medication which decreases the client's joint pain.
  - 4. It increases the production of synovial fluid in the joint.
- **22.** The nurse is admitting the client with OA to the medical floor. Which statement by the client indicates an alternative form of treatment for OA?
  - 1. "I take medication every two (2) hours for my pain."
  - 2. "I use a heating pad when I go to bed at night."
  - 3. "I wear a copper bracelet to help with my OA."
  - 4. "I always wear my ankle splints when I sleep."

- **23.** The client is complaining of joint stiffness, especially in the morning. Which diagnostic tests should the nurse expect the health-care provider to order to R/O osteoarthritis?
  - 1. Full-body magnetic resonance imaging scan.
  - 2. Serum studies for synovial fluid amount.
  - 3. X-ray of the affected joints.
  - 4. Serum erythrocyte sedimentation rate (ESR).
- **24.** The nurse is caring for the following clients. After receiving the shift report, which client should the nurse assess first?
  - 1. The client with a total knee replacement who is complaining of a cold foot.
  - 2. The client diagnosed with osteoarthritis who is complaining of stiff joints.
  - 3. The client who needs to receive a scheduled intravenous antibiotic.
  - 4. The client diagnosed with back pain who is scheduled for a lumbar myelogram.

# **Osteoporosis**

- **25.** The nurse is discussing osteoporosis with a group of women. Which factor will the nurse identify as a nonmodifiable risk factor?
  - 1. Calcium deficiency.
  - 2. Tobacco use.
  - 3. Female gender.
  - 4. High alcohol intake.
- **26.** The client diagnosed with osteoporosis asks the nurse, "Why does smoking cigarettes cause my bones to be brittle?" Which response by the nurse is most appropriate?
  - 1. "Smoking causes nutritional deficiencies which contribute to osteoporosis."
  - 2. "Tobacco causes an increase in blood supply to the bones, causing osteoporosis."
  - 3. "Smoking low-tar cigarettes will not cause your bones to become brittle."
  - 4. "Nicotine impairs the absorption of calcium, causing decreased bone strength."
- **27.** Which signs/symptoms indicate to the nurse the client has developed osteoporosis?
  - 1. The client has lost one (1) inch in height.
  - 2. The client has lost 12 pounds in the last year.
  - 3. The client's hands are painful to the touch.
  - 4. The client's serum uric acid level is elevated.
- **28.** The client is being evaluated for osteoporosis. Which diagnostic test is the most accurate when diagnosing osteoporosis?
  - 1. X-ray of the femur.
  - 2. Serum alkaline phosphatase.
  - 3. Dual-energy x-ray absorptiometry (DEXA).
  - 4. Serum bone Gla-protein test.
- **29.** Which foods should the nurse recommend to a client when discussing sources of dietary calcium?
  - 1. Yogurt and dark-green, leafy vegetables.
  - 2. Oranges and citrus fruits.
  - 3. Bananas and dried apricots.
  - 4. Wheat bread and bran.
- **30.** Which intervention is an example of a secondary nursing intervention when discussing osteoporosis?
  - 1. Obtain a bone density evaluation test.
  - 2. Perform non-weight-bearing exercises regularly.
  - 3. Increase the intake of dietary calcium.
  - 4. Refer clients to a smoking cessation program.

- **31.** The female client diagnosed with osteoporosis tells the nurse she is going to perform swim aerobics for 30 minutes every day. Which response is most appropriate by the nurse?
  - 1. Praise the client for committing to do this activity.
  - 2. Explain to the client walking 30 minutes a day is a better activity.
  - 3. Encourage the client to swim every other day instead of daily.
  - 4. Discuss with the client how sedentary activities help prevent osteoporosis.
- **32.** The client newly diagnosed with osteoporosis is prescribed calcitonin by nasal spray. Which assessment data indicate to the nurse an adverse effect of the medication?
  - 1. The client complains of nausea and vomiting.
  - 2. The client is drinking two (2) glasses of milk a day.
  - 3. The client has a runny nose and nasal itching.
  - 4. The client has had numerous episodes of nosebleeds.
- **33.** The nurse is teaching a class to pregnant teenagers. Which information is most important when discussing ways to prevent osteoporosis?
  - 1. Take at least 1,200 mg of calcium supplements a day.
  - 2. Eat foods low in calcium and high in phosphorus.
  - 3. Osteoporosis does not occur until around age 50 years.
  - 4. Remain as active as possible until the baby is born.
- **34.** The 84-year-old client is a resident in a long-term care facility. Which intervention should be implemented to help prevent complications secondary to osteoporosis?
  - 1. Keep the bed in the high position.
  - 2. Perform passive range-of-motion exercises.
  - 3. Turn the client every two (2) hours.
  - 4. Provide nighttime lights in the room.
- **35.** The client is taking calcium carbonate (Tums) to help prevent further development of osteoporosis. Which teaching should the nurse implement?
  - 1. Encourage the client to take Tums with at least eight (8) ounces of water.
  - 2. Teach the client to take Tums with the breakfast meal only.
  - 3. Instruct the client to take Tums 30 to 60 minutes before a meal.
  - 4. Discuss the need to get a monthly serum calcium level.
- **36.** The client must take three (3) grams of calcium supplement a day. The medication comes in 500-mg tablets. How many tablets will the client need to take daily?

### **Amputation**

- **37.** The nurse instructs the client with a right BKA to lie on the stomach for at least 30 minutes a day. The client asks the nurse, "Why do I need to lie on my stomach?" Which statement is the most appropriate statement by the nurse?
  - 1. "This position will help your lungs expand better."
  - 2. "Lying on your stomach will help prevent contractures."
  - 3. "Many times this will help decrease pain in the limb."
  - 4. "The position will take pressure off your backside."
- **38.** The recovery room nurse is caring for a client who has just had a left BKA. Which intervention should the nurse implement?
  - 1. Assess the client's surgical dressing every two (2) hours.
  - 2. Do not allow the client to see the residual limb.
  - 3. Keep a large tourniquet at the client's bedside.
  - 4. Perform passive range-of-motion exercises to the right leg.

- **39.** The 62-year-old client diagnosed with type 2 diabetes who has a gangrenous right toe is being admitted for a below-the-knee amputation. Which nursing intervention should the nurse implement?
  - 1. Assess the client's nutritional status.
  - 2. Refer the client to an occupational therapist.
  - 3. Determine if the client is allergic to IVP dye.
  - 4. Start a 22-gauge Angiocath in the right arm.
- **40.** The male nurse is helping his friend cut wood with an electric saw. His friend cuts two fingers of his left hand off with the saw. Which action should the nurse implement first?
  - 1. Wrap the left hand with towels and apply pressure.
  - 2. Instruct the friend to hold his hand above his head.
  - 3. Apply pressure to the radial artery of the left hand.
  - 4. Go into the friend's house and call 911.
- **41.** A person's right thumb was accidentally severed with an axe. The amputated right thumb was recovered. Which action by the nurse preserves the thumb so it could possibly be reattached in surgery?
  - 1. Place the right thumb directly on some ice.
  - 2. Put the right thumb in a glass of warm water.
  - 3. Wrap the thumb in a clean piece of material.
  - 4. Secure the thumb in a plastic bag and place on ice.
- **42.** The Jewish client with peripheral vascular disease is scheduled for a left AKA. Which question is most important for the operating room nurse to ask the client?
  - 1. "Have you made any special arrangements for your amputated limb?"
  - 2. "What types of food would you like to eat while you're in the hospital?"
  - 3. "Would you like a rabbi to visit you while you are in the recovery room?"
  - 4. "Will you start checking your other foot at least once a day for cuts?"
- **43.** The client is three (3) hours postoperative left AKA. The client tells the nurse, "My left foot is killing me. Please do something." Which intervention should the nurse implement?
  - 1. Explain to the client his left leg has been amputated.
  - 2. Medicate the client with a narcotic analgesic immediately.
  - 3. Instruct the client on how to perform biofeedback exercises.
  - 4. Place the client's residual limb in the dependent position.
- **44.** The nurse is caring for a client with a right below-the-knee amputation. There is a large amount of bright red blood on the client's residual limb dressing. Which intervention should the nurse implement first?
  - 1. Notify the client's surgeon immediately.
  - 2. Assess the client's blood pressure and pulse.
  - 3. Reinforce the dressing with additional dressing.
  - 4. Check the client's last hemoglobin and hematocrit level.
- **45.** The nurse is caring for clients on a surgical unit. Which nursing task is most appropriate for the nurse to delegate to an unlicensed assistive personnel (UAP)?
  - 1. Help the client with a 2-day postop amputation put on the prosthesis.
  - 2. Request the UAP double-check a unit of blood to be hung.
  - 3. Change the surgical dressing on the client with a Syme's amputation.
  - 4. Ask the UAP to take the client to the physical therapy department.
- **46.** The client with a right AKA is being taught how to toughen the residual limb. Which intervention should the nurse implement?
  - 1. Instruct the client to push the residual limb against a pillow.
  - 2. Demonstrate how to apply an elastic bandage around the residual limb.
  - 3. Encourage the client to apply vitamin  $B_{12}$  to the surgical incision.
  - 4. Teach the client to elevate the residual limb at least three (3) times a day.

- **47.** The 27-year-old client has a right above-the-elbow amputation secondary to a boating accident. Which statement to the rehabilitation nurse indicates the client has accepted the amputation?
  - 1. "I am going to sue the guy who hit my boat."
  - 2. "The therapist is going to help me get retrained for another job."
  - 3. "I decided not to get a prosthesis. I don't think I need it."
  - 4. "My wife is so worried about me and I wish she weren't."
- **48.** The 32-year-old male client with a traumatic left AKA is being discharged from the rehabilitation department. Which discharge instructions should be included in the teaching? Select all that apply.
  - 1. Report any pain not relieved with analgesics.
  - 2. Eat a well-balanced diet and increase protein intake.
  - 3. Be sure to attend all outpatient rehabilitation appointments.
  - 4. Encourage the client to attend a support group for amputations.
  - 5. Stay at home as much as possible for the first couple of months.

### **Fractures**

- **49.** The client is taken to the emergency department with an injury to the left arm. Which intervention should the nurse implement first?
  - 1. Assess the nailbeds for capillary refill time.
  - 2. Remove the client's clothing from the arm.
  - 3. Call radiology for a STAT x-ray of the extremity.
  - 4. Prepare the client for the application of a cast.
- **50.** The nurse is preparing the plan of care for the client with a closed fracture of the right arm. Which problem is most appropriate for the nurse to identify?
  - 1. Risk for ineffective coping related to the inability to perform ADLs.
  - 2. Risk for compartment syndrome-related injured muscle tissue.
  - 3. Risk for infection related to exposed bone and tissue.
  - 4. Risk for complications related to compromised neurovascular status.
- **51.** Which interventions should the nurse implement for the client diagnosed with an open fracture of the left ankle? Select all that apply.
  - 1. Apply an immobilizer snugly to prevent edema.
  - 2. Apply an ice pack for 10 minutes and remove for 20 minutes.
  - 3. Place the extremity in the dependent position to allow drainage.
  - 4. Obtain an x-ray of the ankle after applying the immobilizer.
  - 5. Administer tetanus toxoid, 0.5 mL intramuscularly, in the deltoid.
- **52.** The nurse is caring for a client with a fractured left tibia and fibula. Which data should the nurse report to the health-care provider immediately?
  - 1. Localized edema and discoloration occurring hours after the injury.
  - 2. Generalized weakness and increasing sensitivity to touch.
  - 3. Dorsalis pedal pulse cannot be located with a Doppler and increasing pain.
  - 4. Pain relieved after taking four (4) mg hydromorphone, a narcotic analgesic.
- **53.** The unlicensed assistive personnel (UAP) reports a client with a fractured femur has "globs" floating in the urinal. What intervention should the nurse implement first?
  - 1. Assess the client for dyspnea and altered mental status.
  - 2. Obtain an arterial blood gas and order a portable chest x-ray.
  - 3. Call the HCP for a ventilation/perfusion scan.
  - 4. Instruct the UAP keep the client on strict bedrest.

- **54.** The nurse is caring for an 80-year-old client admitted with a fractured right femoral neck who is oriented × 1. Which intervention should the nurse implement first?
  - 1. Check for a positive Homans' sign.
  - 2. Encourage the client to take deep breaths and cough.
  - 3. Determine the client's normal orientation status.
  - 4. Monitor the client's Buck's traction.
- **55.** The client admitted with a diagnosis of a fractured hip who is in Buck's traction is complaining of severe pain. Which intervention should the nurse implement?
  - 1. Adjust the patient-controlled analgesia (PCA) machine for a lower dose.
  - 2. Ensure the weights of the Buck's traction are off the floor and hang freely.
  - 3. Raise the head of the bed to 45 degrees and the foot to 15 degrees.
  - 4. Turn the client on the affected leg using pillows to support the other leg.
- **56.** The nurse is providing discharge teaching to the 12-year-old with a fractured humerus and the parents. Which information should the nurse include regarding cast care?
  - 1. Keep the fractured arm at heart level.
  - 2. Use a wire hanger to scratch inside the cast.
  - 3. Apply an ice pack to any itching area.
  - 4. Explain foul smells are expected occurrences.
- **57.** Which statement by the client diagnosed with a fractured ulna indicates to the nurse the client needs further teaching?
  - 1. "I need to eat a high-protein diet to ensure healing."
  - 2. "I need to wiggle my fingers every hour to increase circulation."
  - 3. "I need to take my pain medication before my pain is too bad."
  - 4. "I need to keep this immobilizer on when lying down only."
- **58.** The nurse is preparing the care plan for a client with a fractured lower extremity. Which outcome is most appropriate for the client?
  - 1. The client will maintain function of the leg.
  - 2. The client will ambulate with assistance.
  - 3. The client will be turned every two (2) hours.
  - 4. The client will have no infection.
- **59.** The nurse is caring for a client diagnosed with a fracture of the right distal humerus. Which data indicate a complication? Select all that apply.
  - 1. Numbness and mottled cyanosis.
  - 2. Paresthesia and paralysis.
  - 3. Proximal pulses and point tenderness.
  - 4. Coldness of the extremity and crepitus.
  - 5. Palpable radial pulse and functional movement.
- **60.** An 88-year-old client is admitted to the orthopedic floor with the diagnosis of fractured pelvis. Which intervention should the nurse implement first?
  - 1. Insert an indwelling catheter.
  - 2. Administer a Fleet's enema.
  - 3. Assess abdomen for bowel sounds.
  - 4. Apply Buck's traction.

### **Joint Replacements**

- **61.** The nurse is preparing the preoperative client for a total hip replacement (THR). Which intervention should the nursing implement postoperatively?
  - 1. Keep an abduction pillow in place between the legs at all times.
  - 2. Cough and deep breathe at least every four (4) to five (5) hours.
  - 3. Turn to both sides every two (2) hours to prevent pressure ulcers.
  - 4. Sit in a high-seated chair for a flexion of less than 90 degrees.

- **62.** The client one (1) day postoperative total hip replacement complains of hearing a "popping sound" when turning. Which assessment data should the nurse report immediately to the surgeon?
  - 1. Dark red-purple discoloration.
  - 2. Equal length of lower extremities.
  - 3. Groin pain in the affected leg.
  - 4. Edema at the incision site.
- **63.** The nurse is discharging a client who had a total hip replacement. Which statement indicates further teaching is needed?
  - 1. "I should not cross my legs because my hip may come out of the socket."
  - 2. "I will call my HCP if I have a sudden increase in pain."
  - 3. "I will sit on a chair with arms and a firm seat."
  - 4. "After three (3) weeks, I don't have to worry about infection."
- **64.** The nurse finds small, fluid-filled lesions on the margins of the client's surgical dressing. Which statement is the most appropriate scientific rationale for this occurrence?
  - 1. These were caused by the cautery unit in the operating room.
  - 2. These are papular wheals from herpes zoster.
  - 3. These are blisters from the tape used to anchor the dressing.
  - 4. These macular lesions are from a latex allergy.
- **65.** Which interventions should be included in the discharge teaching for a client who had a total hip replacement? Select all that apply.
  - 1. Discuss the client's weight-bearing limits.
  - 2. Request the client demonstrate use of assistive devices.
  - 3. Explain the importance of increasing activity gradually.
  - 4. Instruct the client not to take medication prior to ambulating.
  - 5. Tell the client to ambulate with open-toed house shoes.
- **66.** The nurse is caring for the client who has had a total hip replacement. Which data indicate the surgical treatment is effective?
  - 1. The client states the pain is at a "3" on a 1-to-10 scale.
  - 2. The client has a limited ability to ambulate.
  - 3. The client's left leg is shorter than the right leg.
  - 4. The client ambulates to the bathroom.
- **67.** The nurse is caring for a client six (6) hours postoperative right total knee replacement. Which data should the nurse report to the surgeon?
  - 1. A total of 100 mL of red drainage in the autotransfusion drainage system.
  - 2. Pain relief after using the patient-controlled analgesia (PCA) pump.
  - 3. Cool toes, distal pulses palpable, and pale nailbeds bilaterally.
  - 4. Urinary output of 60 mL of clear yellow urine in three (3) hours.
- **68.** The client who had a total knee replacement is being discharged home. To which multidisciplinary team member should the nurse refer the client?
  - 1. The occupational therapist.
  - 2. The physiatrist.
  - 3. The recreational therapist.
  - 4. The home health nurse.
- **69.** The nurse is caring for a client with a right total knee repair. Which intervention should the nurse implement?
  - 1. Monitor the continuous passive motion machine.
  - 2. Apply thigh-high TED hose bilaterally.
  - 3. Place the abductor pillow between the legs.
  - 4. Encourage the family to perform ADLs for the client.

- **70.** The nurse is caring for the client who had a right shoulder replacement. Which data warrant immediate intervention?
  - 1. The client's hemoglobin is 8.1 g/dL.
  - 2. The client's white blood cell count is 9,000/mm<sup>3</sup>.
  - 3. The client's creatinine level is 0.8 mg/dL.
  - 4. The client's potassium level is 4.2 mEq/L.
- **71.** The nurse is assessing the client who is postoperative total knee replacement. Which assessment data warrant immediate intervention?
  - 1. T 99°F, HR 80, RR 20, and BP 128/76.
  - 2. Pain in the unaffected leg during dorsiflexion of the ankle.
  - 3. Bowel sounds heard intermittently in four quadrants.
  - 4. Diffuse, crampy abdominal pain.
- **72.** The nurse is working on an orthopedic floor. Which client should the nurse assess first after the change-of-shift report?
  - 1. The 84-year-old female with a fractured right femoral neck in Buck's traction.
  - 2. The 64-year-old female with a left total knee replacement who has confusion.
  - 3. The 88-year-old male post-right total hip replacement with an abduction pillow.
  - 4. The 50-year-old postop client with a continuous passive motion (CPM) device.