

## MUSCULOSKELETAL DISORDER

1. **A.** Degenerative joint disease

Obesity predisposes the client to degenerative joint disease. Obesity isn't a predisposing factor for muscular dystrophy, scoliosis, or Paget's disease

2. **B.** Aquatic exercise

When combined with a weight loss program, aquatic exercise would be best because it cushions the joints and allows the client to burn off calories. Aquatic exercise promotes circulation, muscle toning, and lung expansion, which promote healthy preoperative conditioning.

3. **B.** After menopause, the body's bone density declines, resulting in a gradual loss of height."

The nurse should tell the client that after menopause, the loss of estrogen leads to a loss in bone density, resulting in a loss of height.

4. **C.** Limit movements resulting in internal rotation and adduction of the affected hip.

**A.** Teach the client not to cross their legs.

With a total hip replacement, correct positioning and movement is important to prevent dislocation. Dislocation after hip replacement is minimized when the client avoids movements resulting in internal rotation and adduction of the affected hip. Teaching the client not to cross their legs is important to prevent dislocation.

5. **D.** A diet high in protein and nutrients

It is essential for the nurse to instruct on a diet that is high in protein and nutrients to increase healing and strengthen the immune system.

6. **B.** Notify the orthopedic surgeon.

If a prosthesis becomes dislocated, the nurse should immediately notify the surgeon. This is done so the hip can be reduced and stabilized promptly to prevent nerve damage and to maintain circulation.

7. **B.** Avoid prolonged sitting and standing.

Prolonged sitting and standing should be avoided because they strain the lower back.

8. **D.** Heavy smoking, sedentary lifestyle, and high intake of carbonated drinks  
Osteoporosis has been linked to heavy smoking. A sedentary lifestyle results in

more osteoclastic or breakdown activity rather than bone building or osteoblastic activity. Because carbonated drinks tend to have high phosphate levels, the inverse relationship of phosphorus to calcium results in a depletion of calcium.

9. **D.** "Ergonomic changes can be incorporated into your workday to reduce stress on your wrist."

Ergonomic changes, such as adjusting keyboard height, can help clients with carpal tunnel syndrome avoid hyperextension of the wrist.

10. **D.** The client performs isometric exercises to the affected extremity three times per day.

Isometric contractions increase the tension within a muscle but do not produce movement. Repeated isometric contractions make muscles grow larger and stronger.

11. **D.** "Activities that tend to cause adduction of the hip tend to cause dislocation, so try to avoid them."

Dislocation precautions include: avoid extremes of internal rotation, adduction, and 90-degree flexion of affected hip for at least 4 to 6 weeks after the procedure.

12. **D.** The recommended daily allowance of calcium may be found in a wide variety of foods.

Premenopausal women require 1,000 mg of calcium per day. Postmenopausal women require 1,500 mg per day. Clients usually can get the recommended daily requirement of calcium by eating a varied diet.

13. **C.** "Women of African descent are at the greatest risk for osteoporosis." Small-boned, fair-skinned women of northern European descent are at the greatest risk for osteoporosis, not women of African descent.

14. **B.** Check the client's bladder for distention.

The client is experiencing autonomic dysreflexia, which is a medical emergency. The nurse should immediately evaluate the client for bladder distention and be prepared to catheterize the client.

15. **D.** Assessing for sensation in the legs

For epidural analgesia, a catheter is placed outside the dura mater in the epidural space. Catheter displacement, which may cause spinal injury, is signaled by loss of

motion and sensation in the legs. Therefore, the nurse should assess closely for sensation and ask about numbness of the leg.

16. **B.** "I should wear a thin cotton undershirt under the brace."

The client should wear a thin cotton undershirt under the brace to prevent the brace from abrading directly against the skin. The cotton material also aids in absorbing any moisture, such as perspiration, that could lead to skin irritation and breakdown.

17. **A.** No further increase in bone length occurs.

After closure of the epiphyses, no further increase in bone length can occur. The other options are inappropriate and not related to closure of the epiphyses.

18. **C.** Inability to perform active movement and pain with passive movement.

With compartment syndrome, the client can't perform active movement, and pain occurs with passive movement.

19. **B.** The nurse should administer the drug immediately before bedtime.

The nurse should administer zolpidem immediately before bedtime because the onset of action is rapid.

20. **A.** The area distal to the fracture.

The nursing assessment is first focused on the region distal to the fracture for neurovascular injury or compromise. When a nerve or blood vessel is severed or obstructed at the actual fracture site, innervation to the nerve or blood flow to the vessel is disrupted below the site; therefore, the area distal to the fracture site is the area of compromised neurologic input or vascular flow and return, not the area above the fracture site or the fracture site itself.

21. **A.** "I don't know if I'll be able to get off that low toilet seat at home by myself."

The client requires additional teaching if he is concerned about using a low toilet seat. To prevent hip dislocation after a total hip replacement, the client must avoid bending the hips beyond 90 degrees. The nurse should instruct the client to use assistive devices, such as a raised toilet seat, to prevent severe hip flexion.

22. **C.** Sandbags.

It is best to support the client's leg in its proper anatomic position and to prevent

external rotation by supporting the leg with sandbags. A trochanter roll can also be used. Sandbags should be placed along the length of the thigh and lower.

23. **A.** Risk for infection related to effects of trauma

A compound fracture involves an opening in the skin at the fracture site. Because the skin is the body's first line of defense against infection, any skin opening places the client at risk for infection.

24. **B.** "Don't flex your hip more than 90 degrees, don't cross your legs, and have someone help you put your shoes on."

Falls in the home cause most injuries among the elderly

25. **D.** The ropes are in the wheel grooves of the pulleys.

For the weights to maintain the therapeutic effect of the traction, they must be properly positioned, free hanging, and should be removed only in life-threatening situations. Effective traction depends on the client being positioned at the head of the bed. Sufficient weight is applied initially to overcome spasm in affected muscles. As the muscles relax, the weight may be reduced. The amount of weight used is determined by the physician and is not changed each shift.

26. **C.** Amplitude and symmetry of both extremities

Assessment of any peripheral pulse should include the characteristics of the pulse (e.g., amplitude, rhythm, and rate). The presence or lack of symmetry in the peripheral pulses must also be assessed.

27. **D.** Prevent dislocation of the prosthesis.

After a total hip replacement, it is important to maintain the hip in a state of abduction to prevent dislocation of the prosthesis