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Osteoporosis

Patient name: _____

Admission: _____

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DATE INITIAL**I. The client/caregiver can define osteoporosis.**

- A. It is a bone disorder in which the reabsorption of bone exceeds the formation of bone.
- B. It results in decreased bone mass and bone density causing bones to be brittle.

II. The client/caregiver can list factors that increase risk.

- A. Menopause
- B. Advancing age
- C. Limited mobility or sedentary lifestyle
- D. Alcohol and nicotine abuse (decreases calcium absorption and retention)
- E. Family history
- F. Eating disorders
- G. Inadequate dietary intake of calcium
- H. High intake of caffeine
- I. Various diseases, such as liver or kidney disease and chronic obstructive pulmonary disease
- J. Certain medications such as antacids, corticosteroids, and heparin
- K. A diet low in calcium and vitamin D and high in phosphorous
- L. Following bariatric surgery
- M. Men, who can develop osteoporosis but much less often

III. The client/caregiver can recognize signs and symptoms.

- A. Curvature of the spine
- B. Loss of height
- C. Backache
- D. Frequent fractures—most often fractures of spine, hips, or wrists
- E. Decreased density of bone
- F. Decreased strength in muscles and joints

IV. The client/caregiver can list measures to prevent or manage osteoporosis.

- A. Bone density tests for evaluation and diagnosis.
- B. Exercise can help build bone strength and slow bone loss.

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Exercise suggestions

1. Do weight-bearing exercises such as walking, jogging, running, and stair climbing.
 2. Avoid types of exercise that may increase fractures.
 3. Increase exercise gradually, and plan regular rest periods.
 4. Exercise in the sunlight to increase vitamin D.
- C. Eat a well-balanced diet high in calcium, protein, and vitamin D.
 1. Foods high in calcium include milk, yogurt, cheese, salmon, sardines, and dark green vegetables.
 2. Sources of vitamin D include fortified milk, liver, butter, and eggs.
 3. Sources of protein include eggs, milk, and meat.
 4. Read labels for products enriched with calcium and vitamin D.
 5. Take calcium and vitamin D supplements as ordered.
 6. Limit caffeine.
 7. Avoid excessive alcohol.
 8. Add soy products to diet.
 9. Drink plenty of fluids and increase fiber. Calcium supplements can cause gas and constipation. Start supplements gradually to help with these symptoms.
 - D. Follow safety precautions to prevent falls and injuries.
 1. Use good body mechanics and proper posture.
 2. Wear well-fitting nonskid shoes.
 3. Use a cane or walker as indicated to prevent falls.
 4. Use handrails.
 5. Use good lighting and night lights.
 6. Avoid clutter and keep walkways clear.
 - E. Use a firm, supportive mattress.
 - F. Take medications as ordered.
 1. Discuss with your physician the benefits of hormone therapy for

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- you and your individual health needs.
 - 2. Discuss pain control issues.
 - G. Keep follow-up appointments with physician.
 - H. Do not smoke.
 - I. Report to physician signs and symptoms of deformity, pain, edema, decreased range of motion, or paralysis.
- V. The client/caregiver is aware of possible complications.**
- A. Fractures
 - B. Respiratory compromise caused by kyphosis (curved spine)
 - C. Bone deformity

National Institute of Arthritis and Musculoskeletal and Skin Diseases
www.niams.nih.gov

The National Women's Health Information Center
www.4woman.gov/

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RESOURCES

National Osteoporosis Foundation
www.nof.org/

National Institute on Aging
www.nihseniorhealth.gov