

Wold: Basic Geriatric Nursing, 5th Edition

Chapter 03: Physiologic Changes

Test Bank

MULTIPLE CHOICE

1. The nurse keeps the environment warmer for older adults because they are more sensitive to cold because of the age-related changes in their:
 - a. metabolism rate.
 - b. subcutaneous tissue.
 - c. musculoskeletal system.
 - d. peripheral vascular system.

ANS: B

The reduction of subcutaneous tissue as an age-related change causes sensitivity to cold because it is the main insulator of the body.

DIF: Cognitive Level: Application REF: 36 OBJ: 1

TOP: Sensitivity to Cold KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

2. The nurse reassures the distressed 75-year-old male that the wartlike dark macules with distinct borders are not melanomas, but the skin lesions of:
 - a. senile lentigo.
 - b. cutaneous papillomas.
 - c. seborrheic keratoses.
 - d. xerosis.

ANS: C

Dark, slightly raised macules are seborrheic keratoses, which may be mistaken for melanomas.

DIF: Cognitive Level: Comprehension REF: 33 OBJ: 1

TOP: Seborrheic Keratosis KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

3. The nurse is accompanying a group of older adults on a July 4th outing to monitor heat prostration. Older adults are intolerant of heat because of an age-related reduction of:
 - a. melanin.
 - b. perspiration.
 - c. body temperature.
 - d. capillary fragility.

ANS: B

Reduction in perspiration related to reduced sweat gland function results in possible heat intolerance from an inability to cool the body by evaporation.

DIF: Cognitive Level: Analysis REF: 34 OBJ: 2

TOP: Heat Intolerance KEY: Nursing Process Step: Assessment

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

4. The nurse cautions the CNAs to use care when transferring or handling older adults because their vascular fragility will cause:
- altered blood pressure.
 - pressure ulcers.
 - pruritus.
 - senile purpura.

ANS: D

Increased capillary fragility results in subcutaneous hemorrhage or senile purpura from incautious handling by caregivers.

DIF: Cognitive Level: Comprehension REF: 34-35 OBJ: 7

TOP: Senile Purpura KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

5. The nurse assesses a stage I pressure ulcer on an older adult's coccyx by the appearance of a:
- clear blister.
 - nonblanchable area of erythema.
 - scaly abraded area.
 - painful reddened area.

ANS: B

A red nonblanchable area is indicative of a stage I pressure ulcer.

DIF: Cognitive Level: Analysis REF: 35 OBJ: 5

TOP: Pressure Ulcer KEY: Nursing Process Step: Assessment

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

6. The CNA caring for an older adult asks if the yellow, waxy, crusty lesions on the patient's axilla and groin are contagious. The nurse's most helpful response is:
- "Yes. It is cellulitis caused by bacteria."
 - "No. It is seborrheic dermatitis caused by excessive sebum."
 - "Yes. It is an indication of scabies."
 - "No. It is the lesion seen with basal cell carcinoma."

ANS: B

Seborrheic dermatitis is a bothersome skin condition resulting from an excess of sebum.

DIF: Cognitive Level: Application REF: 36 OBJ: 5

TOP: Seborrheic Dermatitis KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

7. The nurse leads a group of postmenopausal older women on a daily 15-minute “walking tour” through the long-term care facility to:
- improve bone strength.
 - orient them to their surroundings.
 - improve their socialization.
 - increase their appetite.

ANS: A

Stress to long bones by weight-bearing and walking will increase bone strength.

DIF: Cognitive Level: Analysis REF: 36 OBJ: 7

TOP: Bone Strength

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

8. When the perplexed 70-year-old woman asks, “How in the world can my bones be brittle when I eat all the right foods?” the nurse’s most informative reply is:
- “Calcium loss is expected in the older adult.”
 - “Calcium is continuously withdrawn from bone for nerve and muscle function.”
 - “Smoking and alcohol consumption speed calcium loss from the bones.”
 - “Walking and standing increase calcium loss from the bone.”

ANS: B

Calcium is constantly withdrawn from the bone for nerve and muscle function and clotting needs.

DIF: Cognitive Level: Comprehension REF: 36-37 OBJ: 3

TOP: Calcium Loss

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

9. When the 70-year-old woman complains, “I weigh exactly the same as I did when I wore a size 10 and now I can barely squeeze into a size 16,” the nurse explains:
- “Metabolism in the older adult creates increased adipose tissue.”
 - “Postmenopausal women gain adipose tissue related to loss of calcium.”
 - “Decrease in muscle mass is replaced with adipose tissue.”
 - “Kyphosis causes a redistribution of weight.”

ANS: C

Decrease in muscle mass is replaced with adipose tissue, which frequently changes the appearance of the body, but not the weight.

DIF: Cognitive Level: Application REF: 39 OBJ: 4

TOP: Loss of Muscle Mass

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

10. When the 70-year-old postmenopausal woman asks whether her hormone replacement therapy (HRT) will prevent bone loss, the nurse’s most helpful response is:
- “No. HRT is not helpful after the age of 60.”
 - “Yes. HRT will prevent bone loss but can cause a stroke, heart attack, or breast

- cancer.”
- c. “No. HRT is reliant on some natural estrogen production from the ovaries.”
 - d. “Yes. HRT is a widely accepted therapy for prevention of bone loss.”

ANS: B

HRT is helpful to prevent bone loss, but the risks of cardiovascular complications and cancer have made the choice of HRT controversial.

DIF: Cognitive Level: Analysis REF: 39 OBJ: 4

TOP: Hormone Replacement Therapy KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

11. An 80-year-old woman who has osteoarthritis complains of how ugly her hands have become since she has developed Heberden nodes, which are:
- a. yellow longitudinal lines in the nails.
 - b. thickened discolored fingernails.
 - c. darkened areas under the fingernail.
 - d. bony enlargements of distal joints of the fingers.

ANS: D

Heberden nodes are bony enlargements of the distal joints of the fingers associated with osteoarthritis.

DIF: Cognitive Level: Knowledge REF: 40 OBJ: 4

TOP: Heberden Nodes KEY: Nursing Process Step: N/A

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

12. The nurse modifies the nursing care plan for a 62-year-old woman in an extended-care facility who is suffering a flare in her rheumatoid arthritis to include interventions to:
- a. increase fluid intake.
 - b. schedule several rest periods to balance activity.
 - c. reduce salt in the diet.
 - d. assist with rigorous finger extension exercises.

ANS: B

Balancing rest and activity allows the resident to remain relatively flexible. Joints may be splinted to reduce contracture.

DIF: Cognitive Level: Application REF: 40 OBJ: 5

TOP: Rheumatoid Arthritis KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

13. The nurse explains that emphysema is a chronic obstructive pulmonary disease characterized by the pathophysiology of:
- a. constriction of the bronchial tree, excessive mucus, and nonproductive cough.
 - b. calcification of the alveoli and a dry cough.
 - c. overinflation of the alveoli, making them ineffective for gas exchange.

- d. inflammation of the trachea and bronchioles, excessive mucus, and productive cough.

ANS: C

Emphysema causes overinflation of the nonelastic alveoli, which disallows gas exchange in the affected alveoli and results in reduced oxygenation.

DIF: Cognitive Level: Comprehension REF: 42 OBJ: 5

TOP: Emphysema KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

14. The nurse explains that the pathophysiology of a myocardial infarct is that:
- a. a portion of the myocardium necroses and scars over.
 - b. the coronary vessels are narrowed during the attack.
 - c. the ischemic myocardium causes pain during the attack but is able to regenerate.
 - d. there is damage to the myocardium but no serious alteration of cardiac output.

ANS: A

The myocardium necroses and scars and does not regenerate. The degree of heart damage is related to the amount of necrosis.

DIF: Cognitive Level: Comprehension REF: 46 OBJ: 6

TOP: Myocardial Infarct KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

15. The nurse is aware that the cardinal signs and symptoms of congestive heart failure are:
- a. dyspnea and edema.
 - b. myocardial pain and hypotension.
 - c. ventricular arrhythmias and cyanosis.
 - d. atrial arrhythmias and polycythemia.

ANS: A

Dyspnea and generalized edema are the cardinal signs and symptoms of congestive heart failure.

DIF: Cognitive Level: Application REF: 47 OBJ: 5

TOP: Congestive Heart Failure KEY: Nursing Process Step: Assessment

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

16. The nurse explains that pernicious anemia is caused by:
- a. an iron deficiency.
 - b. a deficiency of vitamin B₁₂.
 - c. inadequate nutrition.
 - d. blood loss.

ANS: B

Pernicious anemia results from a deficiency of vitamin B₁₂.

DIF: Cognitive Level: Knowledge REF: 50 OBJ: 2

TOP: Pernicious Anemia KEY: Nursing Process Step: Implementation
MSC: NCLEX: Physiological Integrity: Physiological Adaptation

17. The nurse alters the nursing care plan for a patient with a hiatal hernia and resultant gastrointestinal reflux to include interventions for:
- encouraging the patient to lie down after meals.
 - drinking two full glasses of liquid after the evening meal.
 - eating smaller, more frequent meals.
 - using caffeine drinks to assist with digestion.

ANS: C

Eating smaller and more frequent meals does not enlarge the stomach.

DIF: Cognitive Level: Analysis REF: 53 OBJ: 5

TOP: Hiatal Hernia KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Reduction of Risk

18. The nurse suspects that the pale, edematous, listless diabetic patient who has a blood urea nitrogen (BUN) level of 35 mg/dL and a creatinine level of 4 mg/dL has:
- diverticulitis.
 - congestive heart failure.
 - chronic renal failure.
 - benign prostatic hypertrophy.

ANS: C

The increased BUN and creatinine levels indicate renal failure.

DIF: Cognitive Level: Application REF: 56 OBJ: 6

TOP: Renal Failure KEY: Nursing Process Step: Assessment

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

19. The most appropriate intervention added to the nursing care plan for a person with Parkinson disease with a nursing diagnosis of "Nutrition, less than body requirements related to difficulty swallowing," would be to:
- feed the patient at each meal.
 - place the patient in a semi-Fowler position for mealtime.
 - offer a thick, high-nutrition shake as a snack.
 - encourage the patient to drink a sip of water after each bite of solid food.

ANS: C

Thick shakes are easier to swallow without aspiration and will also improve nutrition.

DIF: Cognitive Level: Application REF: 58 OBJ: 5

TOP: Parkinson Disease KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Reduction of Risk

20. The nurse would anticipate that a person with a hemorrhagic CVA to the left hemisphere would exhibit:
- language disturbances.

- b. poor impulse control.
- c. inappropriate affect.
- d. confabulation.

ANS: A

A left hemisphere CVA would most likely cause language disturbances such as aphasia, agraphia, or alexia.

DIF: Cognitive Level: Analysis REF: 61 OBJ: 5

TOP: Cerebrovascular Accident KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

21. When giving written discharge instructions to a person with macular degeneration, the nurse should:
- a. write the instructions in bold print.
 - b. adjust the table and light to assist the patient to use peripheral vision to read.
 - c. place written document directly in front of the patient to read.
 - d. read the document to the patient.

ANS: B

Assist the patient to use peripheral vision because central vision is lost in macular degeneration.

DIF: Cognitive Level: Analysis REF: 64 OBJ: 5

TOP: Macular Degeneration KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

22. The nurse becomes aware of inadequate insulin coverage in a patient with diabetes mellitus type 1 when the patient exhibits:
- a. diminished urine output.
 - b. ketones in the urine.
 - c. shallow and slow respirations.
 - d. extreme diaphoresis.

ANS: B

When there is inadequate insulin coverage for the type 1 diabetic, the diabetic lacks the glycogen to use as energy and attempts to use fat, which creates an acid in the form of ketones.

DIF: Cognitive Level: Application REF: 70 OBJ: 5

TOP: Diabetes Mellitus Type 1 KEY: Nursing Process Step: Assessment

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

23. An 80-year-old extended-care resident comes to the nurse asking for a bandage for a bleeding, dark pigmented mole with irregular shape and border. The nurse documents this assessment and reports it as a suspected:
- a. melanoma.
 - b. basal cell carcinoma.
 - c. cutaneous papilloma.

d. senile lentigo.

ANS: A

Melanomas are dark, irregularly shaped lesions that may cause itching or bleeding. These are potentially deadly and should be reported to obtain quick treatment.

DIF: Cognitive Level: Comprehension REF: 35 OBJ: 5

TOP: Melanoma KEY: Nursing Process Step: Assessment

MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

MULTIPLE RESPONSE

1. The nurse takes into consideration that the factors influencing the timing and extent of age-related changes include _____. *(Select all that apply.)*
- a. health maintenance
 - b. ethnicity
 - c. heredity
 - d. attitude
 - e. environment

ANS: A, C, E

Heredity, environment, and health maintenance affect the timing and magnitude of age-related changes.

DIF: Cognitive Level: Comprehension REF: 32 OBJ: 1

TOP: Influences on Age-Related Changes

KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

2. The nurse reminds an 82-year-old man with rosacea that he should avoid _____. *(Select all that apply.)*
- a. stress
 - b. dairy products
 - c. sun exposure
 - d. spicy foods
 - e. alcohol consumption

ANS: A, C, D, E

The patient who has rosacea should avoid stress, sun exposure, spicy foods, and alcohol consumption.

DIF: Cognitive Level: Comprehension REF: 35 OBJ: 5

TOP: Rosacea KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Reduction of Risk

3. The nurse is aware that in order for a person to support ossification, he or she must have an adequate intake of vitamin(s) _____. *(Select all that apply.)*
- a. A

- b. B₆
- c. C
- d. D
- e. E

ANS: A, C, D

Vitamins A, C, and D are necessary for bone matrix formation and replenishment.

DIF: Cognitive Level: Knowledge REF: 36 OBJ: 7

TOP: Ossification KEY: Nursing Process Step: Planning

MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

4. The nurse uses a chart to outline the risk factors for osteoporosis, which include _____. (Select all that apply.)
- a. menopause
 - b. smoking
 - c. white female
 - d. excessive high-impact exercise
 - e. long-term use of phenytoin (Dilantin)

ANS: A, B, C, E

Menopausal white women who smoke and have had long-term administration of phenytoin (Dilantin), heparin, or corticosteroids are at risk for osteoporosis.

DIF: Cognitive Level: Comprehension REF: 39 OBJ: 5

TOP: Risk Factors for Osteoporosis KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

5. The nurse outlines age-related changes in the respiratory system that put the older adult at risk for infection, which include _____. (Select all that apply.)
- a. reduced ciliary movement
 - b. decrease in alveolar elasticity
 - c. pooling of secretions
 - d. flattened diaphragm
 - e. calcification of costal cartilage

ANS: A, B, C

The flattening of the diaphragm and the calcification of cartilages decrease respiratory effectiveness but do not support pathogen growth as do ciliary and alveolar changes.

DIF: Cognitive Level: Comprehension REF: 42 OBJ: 1

TOP: Age-Related Changes in the Respiratory System

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

COMPLETION

1. The nurse is aware that children with _____ have the treatment and care needs of persons of advanced age.

ANS: progeria

A rare condition called progeria causes severe premature aging. When they are only 8 or 9 years of age, children with progeria have the physiology and appearance of 70-year-olds.

DIF: Cognitive Level: Knowledge REF: 32 OBJ: 7

TOP: Progeria KEY: Nursing Process Step: Planning

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

2. The 75-year-old resident in a long-term care facility complains of muscle pain while riding a stationary bicycle. The nurse explains that the discomfort is related to the buildup of _____ in the muscle.

ANS: lactic acid

Elevated levels of lactic acid may result in muscle fatigue and soreness.

DIF: Cognitive Level: Comprehension REF: 38 OBJ: 7

TOP: Lactic Acid Buildup KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

3. When a 75-year-old male resident in an extended-care facility tells the nurse he wants to build up the muscles in his arms, the nurse recommends a(n) _____ exercise program.

ANS: isotonic

Isotonic exercises such as flexing and extending the arms while holding hand weights build tone and muscle mass.

DIF: Cognitive Level: Comprehension REF: 38 OBJ: 4

TOP: Isotonic Exercises KEY: Nursing Process Step: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

OTHER

1. Arrange these common diseases of the older adult in order of their mortality rate.
 - a. Cancer
 - b. Pneumonia
 - c. Stroke
 - d. Chronic obstructive pulmonary disease (COPD)
 - e. Heart disease

ANS: E, A, C, B, D

The five leading causes of death in older adults are heart disease, cancer, stroke, pneumonia, and COPD.

DIF: Cognitive Level: Comprehension REF: 33 OBJ: 1
TOP: Diseases Rated by Mortality KEY: Nursing Process Step: N/A
MSC: NCLEX: N/A