Adult CCRN/CCRN-E/CCRN-K Certification Review Course: Integumentary and Musculoskeletal

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Integumentary
- IV infiltration
- Pressure ulcers
- Wounds
- Infectious
- Surgical
- Trauma

Musculoskeletal
- Infections
- Functional issues (immobility, falls, gait disorders)

Endo
Heme = 20%
GI
Renal
Integumentary

MS Neuro = 13%
Behavioral

20%
80%
Musculoskeletal
- Structure and function

Acute Care Concerns
- Trauma
- Fat emboli
- Degenerative changes
- Autoimmune
- Metabolic disease
- Joint
- Spinal cord
- Tissue
- Cancers
- Deep vein thrombosis

Nursing Implications
- Immobility
- Nutrition
- Skin care
- Risk of injury
- Impaired gas exchange
- Compression syndrome
- Infection
- Loss of independence
- Post-op complications
- Pain
Trauma/Fractures/Surgery and Complications of Immobility

- Stabilization
- Prevent complications
  - Infections
  - Immobility

Falls
- Increase risk
- Prevention
- Fall screening
- Post-fall evaluation
- QI
- Multidisciplinary approach
- Required reporting
Falls

- Risk assessment
- Prevention
- Progressive mobility

Review Questions

A trauma patient has several fractures. Potential complications include all of the following except:

A. Fat emboli
B. Osteoporosis
C. Osteomyelitis
D. Pain when bones are out of alignment
Question 1—Rationale

A trauma patient has several fractures. Potential complications include all of the following except:

B. Osteoporosis
   - Loss of bone density is due to loss of Ca++, not trauma
   - Fat emboli—Potential complication from long bone fractures
   - Osteomyelitis—Potential complication from trauma if open fractures get infected
   - Pain when bones are out of alignment—Bone healing is a long process, and there is pain when the healing is disrupted

Question 2

For which of the following patients is it most important to ensure movement during the shift?

A. 32-year-old female paraplegic who self transfers and sits up most of the day
B. 68-year-old male stroke patient who had PT this morning
C. 19-year-old male post-op femur rodding who refuses to use crutches when he ambulates
D. 47-year-old obese female 2 days post-op hip replacement

Question 2—Rationale

For which of the following patients is it most important to ensure movement during the shift?

D. 47-year-old obese female 2 days post-op hip replacement
   - High risk because of obesity, post-op, ortho surgery, and indication of progressive mobility
   - 32-year-old female paraplegic who self transfers and sits up most of the day—Decreased risk because of high mobility level
   - 68-year-old male stroke patient who had PT this morning—Decreased risk because of PT
   - 19-year-old male post-op femur rodding who refuses to use crutches when he ambulates—Decreased risk because of high mobility level
Integumentary
- Introduction
- Major functions
  - Barrier from environment
  - Absorption of vitamins (vitamin D)
  - Temperature regulation
  - Sensory perception
  - Shock absorber
  - Appearance and identity
  - Assists with blood pressure regulation

Healing Factors
- General health
- DM
- Infection
- Nutrition
- Activity
- Age and obesity

Healing Factors
Pressure ulcer staging
- Stage IV
- Stage III
- Stage II
- Stage I
A nurse turns a patient and notices that his sacrum is red. The skin is not broken or blistered. This assessment is consistent with what stage pressure ulcer?

A. Stage I pressure ulcer
B. Stage II pressure ulcer
C. Stage III pressure ulcer
D. Stage IV pressure ulcer
Question 3—Rationale

A nurse turns a patient and notices that his sacrum is red. The skin is not broken or blistered. This is consistent with what stage pressure ulcer?

A. Stage I pressure ulcer
   • Stage II pressure ulcer. Skin is not broken
   • Stage III pressure ulcer. Skin is not broken
   • Stage IV pressure ulcer. Skin is not broken

Question 4

A stage IV pressure ulcer typically requires:

A. Debridement
B. Packing
C. Skin grafting
D. Positioning off the area and monitoring

Question 4—Rationale

A stage IV pressure ulcer typically requires:

C. Skin grafting
   • Debridement—Possible treatment for stage II
   • Packing—Possible treatment for stage III
   • Positioning off the area and monitoring—Possible treatment for stage I