<u>NURS 618 Saunders Med Surg Skin</u>

Integumentary Revised

Saunders Med-Surg Skin Integumentary

- 1. A client calls the emergency department and tells the nurse that he came directly into contact with poison ivy shrubs. The client tells the nurse that he cannot see anything on the skin and asks the nurse what to do. The nurse should make which response?
- 1. "Come to the emergency department."
- 2. "Apply calamine lotion immediately to the exposed skin areas."
- 3. "Take a shower immediately, lathering and rinsing several times."
- 4. "It is not necessary to do anything if you cannot see anything on your skin."

Answer:

3. "Take a shower immediately, lathering and rinsing several times."

When an individual comes in contact with a poison ivy plant, the sap from the plant forms an invisible film on the human skin. The client should be instructed to cleanse the area by showering immediately and to lather the skin several times and rinse each time in running water. Removing the poison ivy sap will decrease the likelihood of irritation. Calamine lotion may be one product recommended for use if dermatitis develops. The client does not need to be seen in the emergency department at this time.

- 2. A client is being admitted to the hospital for treatment of acute cellulitis of the lower left leg. During the admission assessment, the nurse expects to note which finding?
- 1. An inflammation of the epidermis only
- 2. A skin infection of the dermis and underlying hypodermis
- 3. An acute superficial infection of the dermis and lymphatics
- 4. An epidermal and lymphatic infection caused by Staphylococcus

Answer:

2. A skin infection of the dermis and underlying hypodermis

Rationale:

Cellulitis is an infection of the dermis and underlying hypodermis that results in a deep red erythema without sharp borders and spreads widely throughout tissue spaces. The skin is erythematous, edematous, tender, and

sometimes nodular. Erysipelas is an acute, superficial, rapidly spreading inflammation of the dermis and lymphatics. The infection is not superficial and extends deeper than the epidermis.

- **3.** The clinic nurse assesses the skin of a client with psoriasis after the client has used a new topical treatment for 2 months. The nurse identifies which characteristics as improvement in the manifestations of psoriasis? **Select all that apply.**
- 1. Presence of striae
- 2. Palpable radial pulses
- 3. Absence of any ecchymosis on the extremities
- 4. Thinner and decrease in number of reddish papules
- 5. Scarce amount of silvery-white scaly patches on the arms

Answers:

- 4. Thinner and decrease in number of reddish papules
- 5. Scarce amount of silvery-white scaly patches on the arms

Rationale:

Psoriasis skin lesions include thick reddened papules or plaques covered by silvery-white patches. A decrease in the severity of these skin lesions is noted as an improvement. The presence of striae (stretch marks), palpable pulses, or lack of ecchymosis is not related to psoriasis.

- 4. The clinic nurse notes that the health care provider has documented a diagnosis of herpes zoster (shingles) in the client's chart. Based on an understanding of the cause of this disorder, the nurse determines that this definitive diagnosis was made by which diagnostic test?
- 1. Positive patch test
- 2. Positive culture results
- 3. Abnormal biopsy results
- 4. Wood's light examination indicative of infection

2. Positive culture results

Rationale:

With the classic presentation of herpes zoster, the clinical examination is diagnostic. However, a viral culture of the lesion provides the definitive diagnosis. Herpes zoster (shingles) is caused by a reactivation of the varicella-zoster virus, the virus that causes chickenpox. A patch test is a skin test that involves the administration of an allergen to the surface of the skin to identify specific allergies. A biopsy would provide a cytological examination of tissue. In a Wood's light examination, the skin is viewed under ultraviolet light to identify superficial infections of the skin.

- 5. A client returns to the clinic for follow-up treatment following a skin biopsy of a suspicious lesion performed 1 week ago. The biopsy report indicates that the lesion is a melanoma. The nurse understands that melanoma has which characteristics? **Select all that apply.**
- 1. Lesion is painful to touch.
- 2. Lesion is highly metastatic.
- 3. Lesion is a nevus that has changes in color.
- 4. Skin under the lesion is reddened and warm to touch.
- 5. Lesion occurs in body area exposed to outdoor sunlight.

- 2. Lesion is highly metastatic.
- 3. Lesion is a nevus that has changes in color.

Rationale:

Melanomas are pigmented malignant lesions originating in the melaninproducing cells of the epidermis. Melanomas cause changes in a nevus
(mole), including color and borders. This skin cancer is highly metastatic,
and a person's survival depends on early diagnosis and treatment.

Melanomas are not painful or accompanied by sign of inflammation.

Although sun exposure increases the risk of melanoma, lesions are most
commonly found on the upper back and legs and on the soles and palms of
persons with dark skin.

- 7. A client arriving at the emergency department has experienced frostbite to the right hand. Which finding would the nurse note on assessment of the client's hand?
- 1. A pink, edematous hand
- 2. Fiery red skin with edema in the nail beds
- 3. Black fingertips surrounded by an erythematous rash
- 4. A white color to the skin, which is insensitive to touch

4. A white color to the skin, which is insensitive to touch

Rationale:

Assessment findings in frostbite include a white or blue color; the skin will be hard, cold, and insensitive to touch. As thawing occurs, flushing of the skin, the development of blisters or blebs, or tissue edema appears. Options 1, 2, and 3 are incorrect.

- 8. The evening nurse reviews the nursing documentation in a client's chart and notes that the day nurse has documented that the client has a stage II pressure ulcer in the sacral area. Which finding would the nurse expect to note on assessment of the client's sacral area?
- 1. Intact skin

- 2. Full-thickness skin loss
- 3. Exposed bone, tendon, or muscle
- 4. Partial-thickness skin loss of the dermis

4. Partial-thickness skin loss of the dermis

Rationale:

In a stage II pressure ulcer, the skin is not intact. Partial-thickness skin loss of the dermis has occurred. It presents as a shallow open ulcer with a redpink wound bed, without slough. It may also present as an intact or open/ruptured serum-filled blister. The skin is intact in stage I. Full-thickness skin loss occurs in stage III. Exposed bone, tendon, or muscle is present in stage IV.

- 9. An adult client was burned in an explosion. The burn initially affected the client's entire face (anterior half of the head) and the upper half of the anterior torso, and there were circumferential burns to the lower half of both arms. The client's clothes caught on fire, and the client ran, causing subsequent burn injuries to the posterior surface of the head and the upper half of the posterior torso. Using the rule of nines, what would be the extent of the burn injury?
- 1. 18%

- 2. 24%
- 3. 36%
- 4. 48%

3. 36%

Rationale:

According to the rule of nines, with the initial burn, the anterior half of the head equals 4.5%, the upper half of the anterior torso equals 9%, and the lower half of both arms equals 9%. The subsequent burn included the posterior half of the head, equaling 4.5%, and the upper half of posterior torso, equaling 9%. This totals 36%.

- 10. The nurse is preparing to care for a burn client scheduled for an escharotomy procedure being performed for a third-degree circumferential arm burn. The nurse understands that which finding is the anticipated therapeutic outcome of the escharotomy?
- 1. Return of distal pulses
- 2. Brisk bleeding from the site
- 3. Decreasing edema formation
- 4. Formation of granulation tissue

1. Return of distal pulses

Rationale:

Escharotomies are performed to relieve the compartment syndrome that can occur when edema forms under nondistensible eschar in a circumferential third-degree burn. The escharotomy releases the tourniquet-like compression around the arm. Escharotomies are performed through avascular eschar to subcutaneous fat. Although bleeding may occur from the site, it is considered a complication rather than an anticipated therapeutic outcome. Usually, direct pressure with a bulky dressing and elevation control the bleeding, but occasionally an artery is damaged and may require ligation. Escharotomy does not affect the formation of edema. Formation of granulation tissue is not the intent of an escharotomy.

- 11. The nurse is caring for a client who sustained superficial partial-thickness burns on the anterior lower legs and anterior thorax. Which finding does the nurse expect to note during the resuscitation/emergent phase of the burn injury?
- 1. Decreased heart rate
- 2. Increased urinary output
- 3. Increased blood pressure
- 4. Elevated hematocrit levels

4. Elevated hematocrit levels

Rationale:

The resuscitation/emergent phase begins at the time of injury and ends with the restoration of capillary permeability, usually at 48 to 72 hours following the injury. During the resuscitation/emergent phase, the hematocrit level increases to above normal because of hemoconcentration from the large fluid shifts. Hematocrit levels of 50% to 55% (0.50 to 0.55) are expected during the first 24 hours after injury, with return to normal by 36 hours after injury. Initially, blood is shunted away from the kidneys and renal perfusion and glomerular filtration are decreased, resulting in low urine output. The burn client is prone to hypovolemia and the body attempts to compensate by increased pulse rate and lowered blood pressure. Pulse rates are typically higher than normal, and the blood pressure is decreased as a result of the large fluid shifts.

12. The nurse is administering fluids intravenously as prescribed to a client who sustained superficial partial-thickness burn injuries of the back and legs. In evaluating the adequacy of fluid resuscitation, the nurse understands that which assessment would provide the **most** reliable indicator for determining the adequacy?

- 1. Vital signs
- 2. Urine output
- 3. Mental status
- 4. Peripheral pulses

2. Urine output

Rationale:

Successful or adequate fluid resuscitation in the client is signaled by stable vital signs, adequate urine output, palpable peripheral pulses, and clear sensorium. However, the most reliable indicator for determining adequacy of fluid resuscitation, especially in a client with burns, is the urine output. For an adult, the hourly urine volume should be 30 to 50 mL.

13. The nurse is caring for a client following an autograft and grafting to a burn wound on the right knee. What would the nurse anticipate to be prescribed for the client?

- 1. Out-of-bed activities
- 2. Bathroom privileges
- 3. Immobilization of the affected leg
- 4. Placing the affected leg in a dependent position

Answer:

3. Immobilization of the affected leg

Rationale:

Autografts placed over joints or on the lower extremities after surgery often are elevated and immobilized for 3 to 7 days. This period of immobilization allows the autograft time to adhere to the wound bed. Getting out of bed, going to the bathroom, and placing the grafted leg dependent would put stress on the grafted wound.

- 14. The health education nurse provides instructions to a group of clients regarding measures that will assist in preventing skin cancer. Which instructions should the nurse provide? **Select all that apply.**
- 1. Sunscreen should be applied every 8 hours.
- 2. Use sunscreen when participating in outdoor activities.
- 3. Wear a hat, opaque clothing, and sunglasses when in the sun.
- 4. Avoid sun exposure in the late afternoon and early evening hours.
- 5. Examine your body monthly for any lesions that may be suspicious.

Answers:

- 2. Use sunscreen when participating in outdoor activities.
- 3. Wear a hat, opaque clothing, and sunglasses when in the sun.
- 5. Examine your body monthly for any lesions that may be suspicious.

Rationale:

The client should be instructed to avoid sun exposure between the hours of brightest sunlight: 10 a.m. and 4 p.m. Sunscreen, a hat, opaque clothing, and sunglasses should be worn for outdoor activities. The client should be instructed to examine the body monthly for the appearance of any cancerous or any precancerous lesions. Sunscreen should be reapplied every 2 to 3 hours and after swimming or sweating; otherwise, the duration of protection is reduced.

- 27. The community health nurse is visiting a homeless shelter and is assessing the clients in the shelter for the presence of scabies. Which assessment finding should the nurse expect to note if scabies is present?
- 1. Brown-red macules with scales
- 2. Pustules on the trunk of the body
- 3. White patches noted on the elbows and knees
- 4. Multiple straight or wavy threadlike lines underneath the skin

Answer:

4. Multiple straight or wavy threadlike lines underneath the skin

Scabies can be identified by the multiple straight or wavy threadlike lines beneath the skin. The skin lesions are caused by the female, which burrows beneath the skin to lay its eggs. The eggs hatch in a few days, and the baby mites find their way to the skin surface, where they mate and complete the life cycle. Options 1, 2, and 3 are not characteristics of scabies.

29. The nurse is concerned about potential skin integrity problems for an unconscious client. Which interventions would be **most appropriate** to include in the plan of care for this client? **Select all that apply.**

- 1. Reposition every 2 hours.
- 2. Use a bed cradle as indicated.
- 3. Apply protective pads to heels and elbows.
- 4. Add a small amount of alcohol to the daily bath water.
- 5. Provide perineal care every 8 hours and after incontinence.

Answers:

- 1. Reposition every 2 hours.
- 2. Use a bed cradle as indicated.
- 3. Apply protective pads to heels and elbows.
- 5. Provide perineal care every 8 hours and after incontinence.

Unconscious clients are completely immobile, having lost the protective reflexes to shift body weight. It is up to the nurse to minimize the risk of prolonged pressure that could cause skin ischemia and breakdown. This is accomplished by repositioning the client every 2 hours. Use of a bed cradle can protect the client's toes from breakdown due to weight from linens. Protective pads can be applied to the heels and elbows to reduce friction and shear. Appropriate perineal care is essential to keep waste products from excoriating the skin. The nurse can reduce skin dryness and irritation by adding a superfatty solution (such as baby oil or castile soap) to the daily bath water. Drying agents such as alcohol are avoided because dry skin can crack and break down.

30. The emergency department nurse is caring for a client who has sustained chemical burns to the esophagus after ingestion of lye. The nurse reviews the health care provider's prescriptions and should plan to question which prescription?

- 1. Gastric lavage
- 2. Intravenous (IV) fluid therapy
- 3. Nothing by mouth (NPO) status
- 4. Preparation for laboratory studies

Answer:

1. Gastric lavage

Rationale:

The client who has sustained chemical burns to the esophagus is placed on NPO status, is given IV fluids for replacement and treatment of possible shock, and is prepared for esophagoscopy and barium swallow to determine the extent of damage. Laboratory studies also may be prescribed. A nasogastric tube may be inserted, but gastric lavage and emesis are avoided to prevent further erosion of the mucosa by the irritating substances that these treatments involve.

31. The nurse is conducting a screening program to identify clients at risk for an integumentary disorder. Which client seen at the screening would most likely be at risk for development of an integumentary disorder?

- 1. An athlete
- 2. An adolescent
- 3. An older client
- 4. A client who tans in an indoor tanning bed

Answer:

4. A client who tans in an indoor tanning bed

Prolonged exposure to the sun (including indoor tanning), unusual cold, or other extreme conditions can damage the skin, posing the highest risk for skin disorders. An athlete would be at low risk of developing an integumentary problem. An adolescent may be prone to the development of acne, but this does not occur in all adolescents. An older client may be at a higher risk than a younger person.

32. The nurse is providing information to a client scheduled for a skin biopsy. The client asks the nurse how painful the procedure is. The nurse should make which response to the client?

- 1. "The procedure is painless."
- 2. "A preoperative medication will put you to sleep."
- 3. "An analgesic will be prescribed after the procedure."
- 4. "The local anesthetic may cause a stinging sensation."

Answer:

4. "The local anesthetic may cause a stinging sensation."

Rationale:

A skin biopsy is not painless. The most common source of pain during a skin biopsy is the initial local anesthetic, which can produce a burning or stinging sensation. A preoperative medication that puts the client to sleep is not a component of this procedure. Analgesics may be prescribed after the

procedure, but this option does not address the issue related to the amount or type of pain associated with the procedure itself.

33. The nurse is reviewing the discharge instructions for the client who had a skin biopsy. Which statement, if made by the client, would indicate a **need** for further instruction?

- 1. "I will keep the dressing dry."
- 2. "I will watch for any drainage from the wound."
- 3. "I will use the antibiotic ointment as prescribed."
- 4. "I will return tomorrow to have the sutures removed."

Answer:

4. "I will return tomorrow to have the sutures removed."

Rationale:

Sutures usually are removed 7 to 10 days after a skin biopsy, depending on health care provider (HCP) preference. After a skin biopsy, the nurse instructs the client to keep the dressing dry and in place for a minimum of 8 hours as prescribed. After the dressing is removed, the site is cleaned once a day with tap water or saline to remove any dry blood or crusts. The HCP may prescribe an antibiotic ointment to minimize local bacterial colonization. The nurse instructs the client to report any redness or

excessive drainage at the site. The site may be closed with sutures or may be allowed to heal without suturing.

34. The nurse prepares to assist the health care provider to examine the client's skin with a Wood's lamp. Which should be included in the preprocedure plan of care?

- 1. Shave the skin site.
- 2. Prepare a local anesthetic.
- 3. Obtain an informed consent.
- 4. Tell the client that the procedure is painless.

Answer:

4. Tell the client that the procedure is painless.

Rationale:

A Wood's light examination is a painless procedure. The skin does not need to be shaved, and a local anesthetic is not necessary. Examination of the skin under a Wood's lamp is always carried out in a darkened room. This is a noninvasive examination; therefore, an informed consent is not required. A hand-held long-wavelength ultraviolet light source or Wood's lamp is used. Areas of blue-green or red fluorescence are associated with certain skin infections.

36. The home care nurse visits an older client who was discharged from the hospital after diagnostic testing. The client complains of chronic dry skin and episodes of pruritus. Which measure should the nurse recommend for the client to alleviate this discomfort?

- 1. Run a dehumidifier in the home.
- 2. Apply astringents to the skin twice daily.
- 3. Apply emollients to the skin after bathing.
- 4. Take baths twice daily using a dilute solution of alcohol and water.

Answer:

3. Apply emollients to the skin after bathing.

Rationale:

One bath or one shower per day for 15 to 20 minutes with warm water and a mild soap should be followed immediately by the application of an emollient to prevent evaporation of water from the hydrated epidermis. The client should avoid using a dehumidifier because this will further dry room air. The client should be instructed to avoid applying rubbing alcohol, astringents, or other drying agents to the skin. A bath using a dilute alcohol solution will cause further drying of the skin.