

# Chapter 28

## Wound Care

# Lesson 28.1

- Define the key terms and key abbreviations in this chapter.
- Describe skin tears, circulatory ulcers, and diabetic foot ulcers and the persons at risk.
- Explain how to help prevent skin tears, circulatory ulcers, and diabetic foot ulcers.
- Describe what to observe about wounds.
- Explain how to secure dressings.

# Lesson 28.1 (Cont.)

- Explain the rules for applying dressings.
- Explain the purpose, effects, and complications of heat and cold applications.
- Describe the rules for applying heat and cold.
- Perform the procedures described in this chapter.
- Explain how to promote PRIDE in the person, the family, and yourself.

# Wound Care

- A wound is a break in the skin or mucous membrane.
- The wound is a portal of entry for microbes.
  - Infection is a major threat.
- Wound care involves:
  - Preventing infection
  - Preventing further injury to the wound and nearby tissues

# Skin Tears

- A skin tear is a break or rip in the skin.
  - The epidermis separates from the underlying tissues.
- Skin tears are caused by:
  - Friction and shearing
  - Pulling or pressure on the skin
  - Bumping a hand, arm, or leg on any hard surface
  - Holding the person's arm or leg too tight
- Tell the nurse at once if you cause or find a skin tear.

# Circulatory Ulcers

- An ulcer is a shallow or deep crater-like sore of the skin or a mucous membrane.
- Circulatory ulcers (vascular ulcers) are open sores on the lower legs or feet.
  - They are caused by decreased blood flow through the arteries or veins.

# Circulatory Ulcers (Cont.)

- Venous ulcers (stasis ulcers)
  - Are open sores on the lower legs or feet
  - Are caused by poor blood flow through the veins
  - Are commonly found on the heels and inner aspect of the ankles
- Arterial ulcers
  - Are open wounds on the lower legs or feet caused by poor arterial blood flow
  - Are found between the toes, on top of the toes, and on the outer side of the ankle

# Circulatory Ulcers (Cont.)

- A diabetic foot ulcer is an open wound on the foot caused by complications from diabetes.
  - Diabetes can affect the nerves and blood vessels.
  - The doctor orders drugs and treatments as needed.
  - To help prevent skin breakdown on the legs and feet, check the person's legs and feet every day.
  - Elastic stockings (AE stockings, TED hose) and elastic bandages exert pressure on the veins.
    - The pressure promotes venous blood return to the heart. This helps prevent blood clots (thrombi).



# Dressings

- Wound dressings have many functions. They:
  - Protect wounds from injury and microbes
  - Absorb drainage
  - Remove dead tissue
  - Promote comfort
  - Cover unsightly wounds
  - Provide a moist environment for wound healing
  - Apply pressure (pressure dressings) to help control bleeding

# Securing Dressings

- Securing dressings
  - Tape and Montgomery ties are used to secure dressings.
    - Adhesive tape sticks well to the skin.
    - Paper, plastic, and cloth tapes usually do not cause allergic reactions.
    - Elastic tape allows movement of the body part.
    - Tape is applied to the top, middle, and bottom parts of the dressing.
    - The tape extends several inches beyond each side of the dressing.
    - Tape is not applied to circle the entire body part.

# Securing Dressings (Cont.)

- Montgomery ties are used for large dressings and frequent dressing changes.
  - Two or three Montgomery ties may be needed on each side.
  - The ties are undone for the dressing change.
  - The adhesive strips are not removed unless soiled.
- Binders are wide bands of elastic fabric.
  - They are applied to the abdomen, chest, or perineal areas.
  - Binders promote healing because they:
    - Support wounds
    - Hold dressings in place
    - Prevent or reduce swelling
    - Promote comfort
    - Prevent injury

# Securing Dressings (Cont.)

- Abdominal binders provide abdominal support and holds dressings in place.
- Breast binders:
  - Support the breasts after surgery.
  - Apply pressure to the breasts after childbirth in the non–breast-feeding mother.
  - Promote comfort and support swollen breasts after childbirth.
- T-binders secure dressings in place after rectal and perineal surgeries.
  - The single T-binder is for women.
  - The double T-binder is for men.

# Heat and Cold Applications

- Heat and cold applications:
  - Promote healing and comfort
  - Reduce tissue swelling
  - Have opposite effects on body function

# Heat and Cold Applications (Cont.)

- Heat applications are often used for musculo-skeletal injuries or problems.
  - They relieve pain, relax muscles, and decrease joint stiffness.
  - They promote healing and reduce tissue swelling.
  - When heat is applied to the skin:
    - Blood vessels in the area dilate (expand or open wider).
    - Blood flow increases.
    - Tissues have more oxygen and nutrients for healing.
    - Excess fluid is removed from the area faster.
    - The skin is red and warm.

# Heat and Cold Applications (Cont.)

- Complications
  - High temperatures can cause burns.
  - When heat is applied too long, blood vessels constrict.
  - Persons at risk for complications include:
    - Older and fair-skinned persons
    - Persons with problems sensing heat and pain
    - Persons with metal implants
- Moist heat has greater and faster effects than dry heat.
  - Moist heat applications include hot compresses, hot soaks, sitz baths, and hot packs.
- Dry heat applications stay at the desired temperature longer.
  - Some hot packs and the aquathermia pad are dry heat applications.

# Heat and Cold Applications (Cont.)

- Cold applications reduce pain, prevent swelling, and decrease circulation and bleeding.
  - Cold has the opposite effect of heat.
  - When cold is applied to the skin, blood vessels constrict.
    - Decreased blood flow reduces the amount of bleeding.
    - Less fluid collects in the tissues.
    - Cold has a numbing effect on the skin.



# Heat and Cold Applications (Cont.)

- Complications include:
  - Pain, burns, blisters, and poor circulation
  - When cold is applied for a long time, blood vessels dilate.
  - Persons at risk for complications include:
    - Older and fair-skinned persons
    - Persons with sensory impairments
- Moist cold applications penetrate deeper than dry ones.
  - The cold compress is a moist cold application.
- Dry cold applications include ice bags, ice collars, and ice gloves.
- Cold packs can be moist or dry applications.