## Chapter 22

## Surgical Wound Care



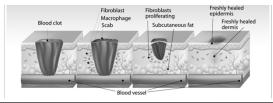
### Lesson 22.1

- Discuss the body's response during each stage of wound healing.
- 2. Discuss the role of nutrition in wound healing.
- 3. Identify common complications of wound healing.
- Differentiate between healing by primary intention and healing by secondary intention.
- Discuss the classification of wounds according to the Centers for Disease Control and Prevention.
- 6. Discuss the factors that impair wound healing and the interventions for each type of wound.
- Explain procedure for applying dry dressings and wet-to-dry dressings.

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## Phases of Wound Healing

- Homeostasis
- Inflammatory phase
- Reconstruction phase
- Maturation phase



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## **Nutrition**

- Nutritional needs
- Fluids
- Rest and activity



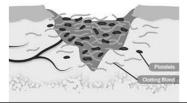
# Complications of Wound Healing

- Impaired wound healing requires accurate observation and ongoing interventions
- Wound bleeding
- Wound infection



## **Process of Wound Healing**

- Primary intention
- Secondary intention
- Tertiary intention



## Wound Classifications

- Cause
- Severity of injury
- Amount of contamination
- Size
- CDC has classified surgical wounds from class I (clean) to class IV (dirty, infected)

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## **Surgical Wound Care**

- Selection of the site
- Standard steps in care
- Care of incision



## Dressings

- Dry dressings
  - > May be chosen for management of a wound with little exudate/drainage
- Wet-to-dry dressing
  - > Primary purpose is to mechanically débride a wound
  - > As the dressing dries, it adheres to the wound and débrides it when the dressing is removed
- Transparent dressings
  - Self-adhesive transparent film is a synthetic permeable membrane that acts as a temporary secondary skin

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#### Lesson 22.2

- Discuss dehiscence and evisceration and the nursing care they involve.
- 9. Identify the procedure for removing sutures and staples.
- Discuss care of the patient with a wound drainage system: Hemovac or Davol suction or T-tube drainage.
- Identify the procedure for performing sterile wound irrigation.
- Identify the nursing interventions for the patient with vacuum-assisted closure of a wound.
- 13. Describe the purposes of bandages and binders and the precautions taken when applying them.
- 14. List nursing diagnoses associated with wound care.

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#### Dehiscence

- Wound layers separate
- Patient may say that something has "given way"
- It may result after periods of sneezing, coughing, or vomiting
- It may be preceded by serosanguineous drainage
- Patient should remain in bed and receive nothing by mouth, be told not to cough, and be reassured
- The nurse should place a warm, moist sterile dressing over the area until the provider evaluates the site



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#### Evisceration

- Abdominal organs protrude through an opened incision
- Patient is to remain in bed, and the wound and contents should be covered with warm, sterile saline dressings
- The surgeon is notified immediately
- This is a medical emergency, and the wound requires surgical repair



## Staples and Sutures

- The surgeon's goal is to enter the cavity involved, repair the injured or diseased area, and minimize trauma as quickly as possible
- Many options are available to the surgeon for closing the surgical incision
- Sutures and staples are generally removed within 7 to 10 days after surgery, or sooner if healing is adequate
- The provider determines and orders removal of sutures or staples one at a time or removal of every other suture or staple and replacement with a Steri-Strip as the first phase, with the remainder removed in the second phase



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## **Exudate and Drainage**

- Serous
- Sanguineous
- Serosanguineous
- If the tissue is infected, exudate/drainage may be brown-green purulent
- Exudate/drainage from organs has its own particular color (bile from the liver and gallbladder is green-brown)
- Assess color, amount, consistency, and odor

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## **Drainage Systems**

- They are used in procedures in which organs were removed or repaired
- Requires close monitoring
- Closed drainage
- Open drainage
- Suction drainage





## Wound Irrigations

- Wound cleansing and irrigation is accomplished using sterile or clean technique
- Cleansing solution is introduced directly into the wound with a syringe, syringe and catheter, shower, or whirlpool
- Fluid retention is avoided by positioning the patient on his or her side to encourage the flow of the irrigant away from the wound
- Promote wound healing through removing debris from a wound surface, decreasing bacterial counts, and loosening and removing eschar
- Cleanse in a direction from the least contaminated area to the most contaminated area

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### Wound Vacuum-Assisted Closure

• Uses negative pressure to remove fluid from surrounding the wound



## **Bandages and Binders**

- $\bullet\,$  After a bandage is applied, the nurse should
  - Assess, document, and immediately report changes in circulation, skin integrity, comfort level, and body function such as ventilation or movement
  - > Loosen or readjust as necessary
  - Have an order to remove or loosen a dressing applied by a provider
  - Explain to the patient that any bandage or binder feels relatively firm or tight
  - Assess to be sure it is properly applied and is providing therapeutic benefit; soiled bandages should be replaced

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## **Nursing Process**

- Nursing diagnoses
  - > Impaired skin integrity
  - > Imbalanced nutrition: more than body requirements
  - > Imbalanced nutrition: less than body requirements
  - > Ineffective tissue perfusion (specify type)