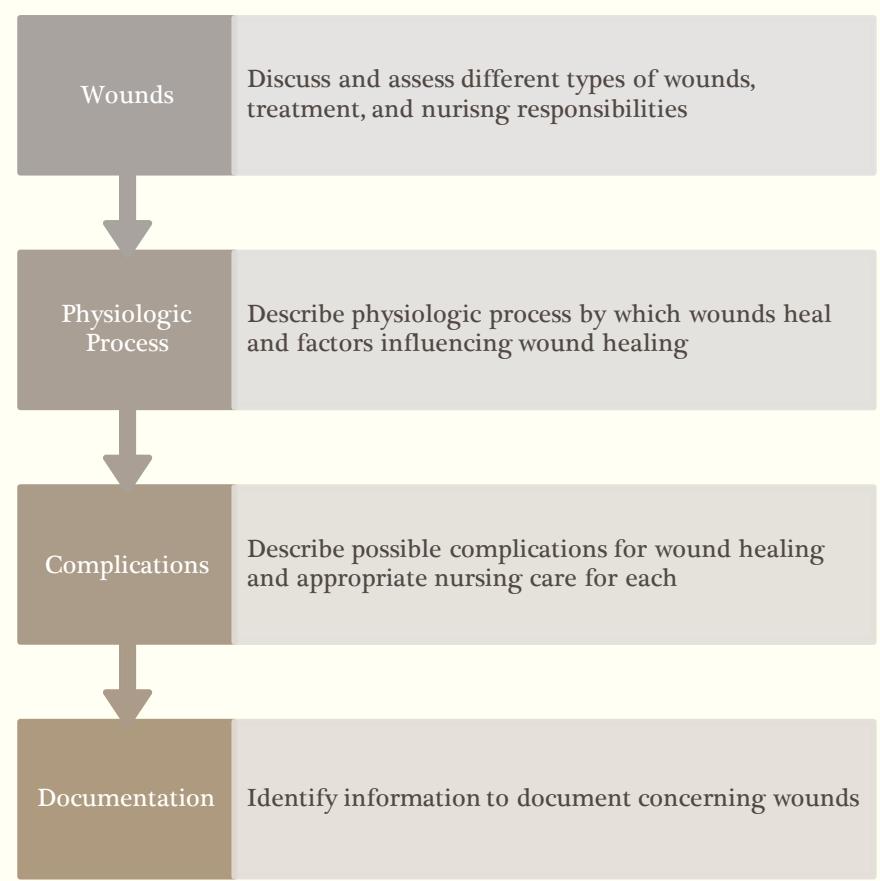


CHAPTER 38 WOUND CARE/TREATMENT OF PRESSURE INJURIES

Audra Xenakis, DNP, RN

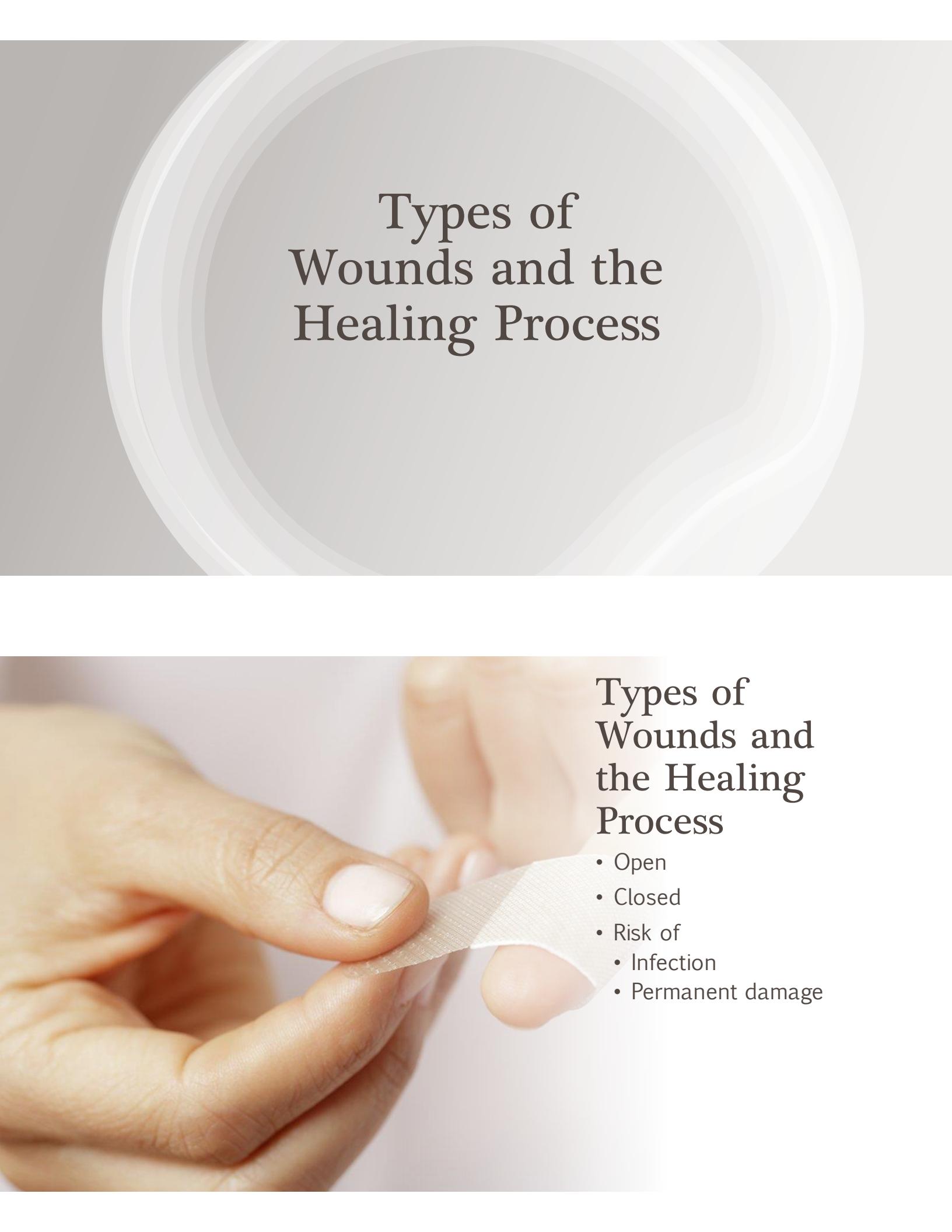
Objectives



Where do Wounds Come from?

Where do wounds come from?





Types of Wounds and the Healing Process

Types of Wounds and the Healing Process

- Open
- Closed
- Risk of
 - Infection
 - Permanent damage

Closed and Open Wounds

Closed Wounds-without break in skin

- Contusion/Bruise
- Hematoma
- Sprain

Open Wounds-break in skin

- Incision
- Laceration
- Abrasion
- Puncture
- Penetrating
- Avulsion
- Ulceration

Closed Wounds

Contusion

Tissue injury

Normally seen on the skin



Hematoma

Tissue injury with damage to blood vessel,

Causes a mass like appearance.



Sprain

Twisting of joint partial rupture of ligaments

Causes swelling



Open Wounds

Incision

- Surgically made. Clean smooth edges



Laceration

- Traumatic. Torn edges



Open Wounds

Abrasions

- Traumatic scraping away of the skin layers



Puncture

- Made by sharp, pointed object through the skin or mucous membranes



Open Wounds

Penetrating

- Made by bullet, metal, or wound fragment. Extends deep



Avulsion

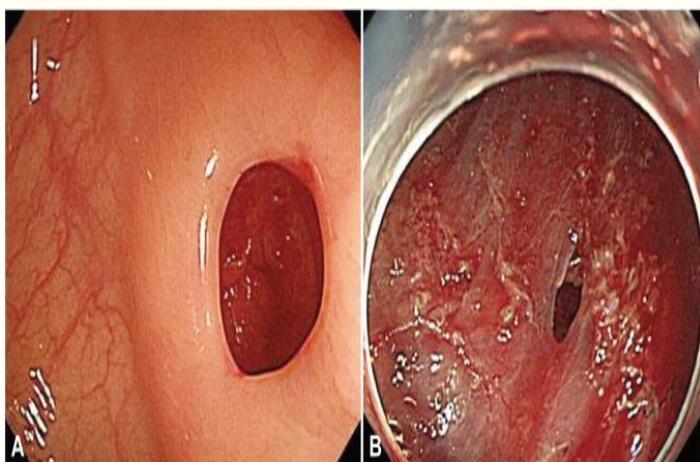
- Tearing away of a structure or part, such as a fingertip. Surgical or not



Open Wounds

Perforation

- Internal organ/body cavity open



Ulceration

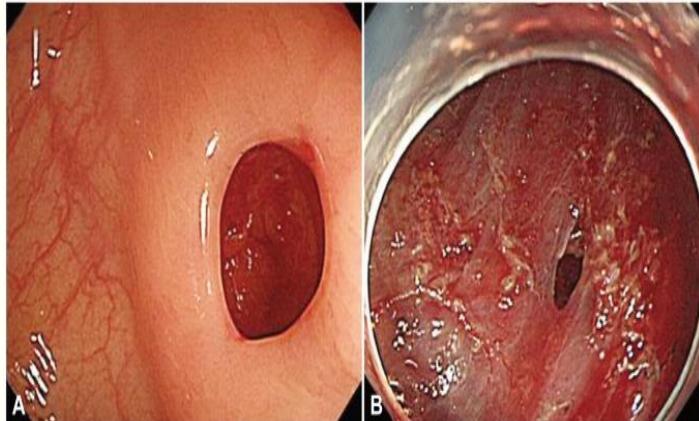
- Excavation of tissue from injury or necrosis



Open Wounds

Perforation

- Internal organ/body cavity tissue open
- Due from infection or penetrating wound



Crush

- Compressed tissue



Wound Thickness

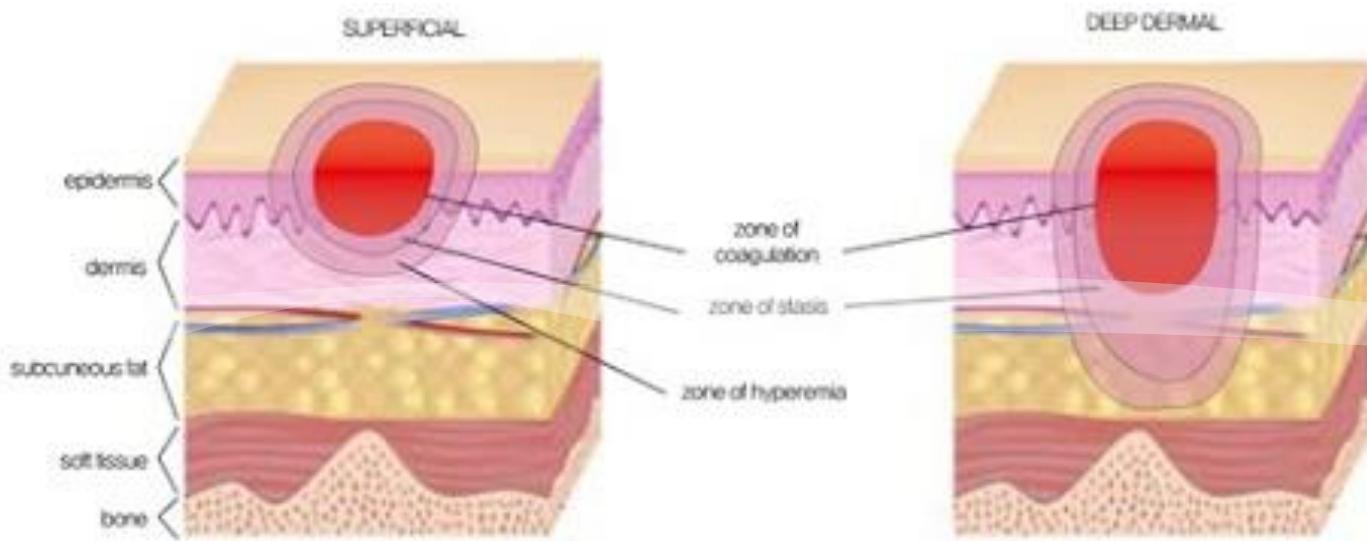
Partial Thickness

- Superficial
- Heals more quickly
- Fibrin clot framework

Full Thickness

- No dermal layer except margins
- Necrotic tissue must be removed for granulation fill

Wound Thickness



Healing Either by Regeneration, Replacement, or Combination

Regeneration

- Body uses **SAME** type of cells to heal
- Partial thickness wounds-same tissue
- Original function and strength remains
- Types of cells that can regenerate:
 - Skin
 - Mucous membranes
 - Bone
 - Muscle
 - Liver
 - Kidney
 - Lung

Replacement

- Body uses **DIFFERENT** types cells to heal
- Full thickness wounds-scar tissue
- Original function and strength may not remain
- Types of cell that use replacement:
 - Heart muscle
 - Central spinal nerve cells

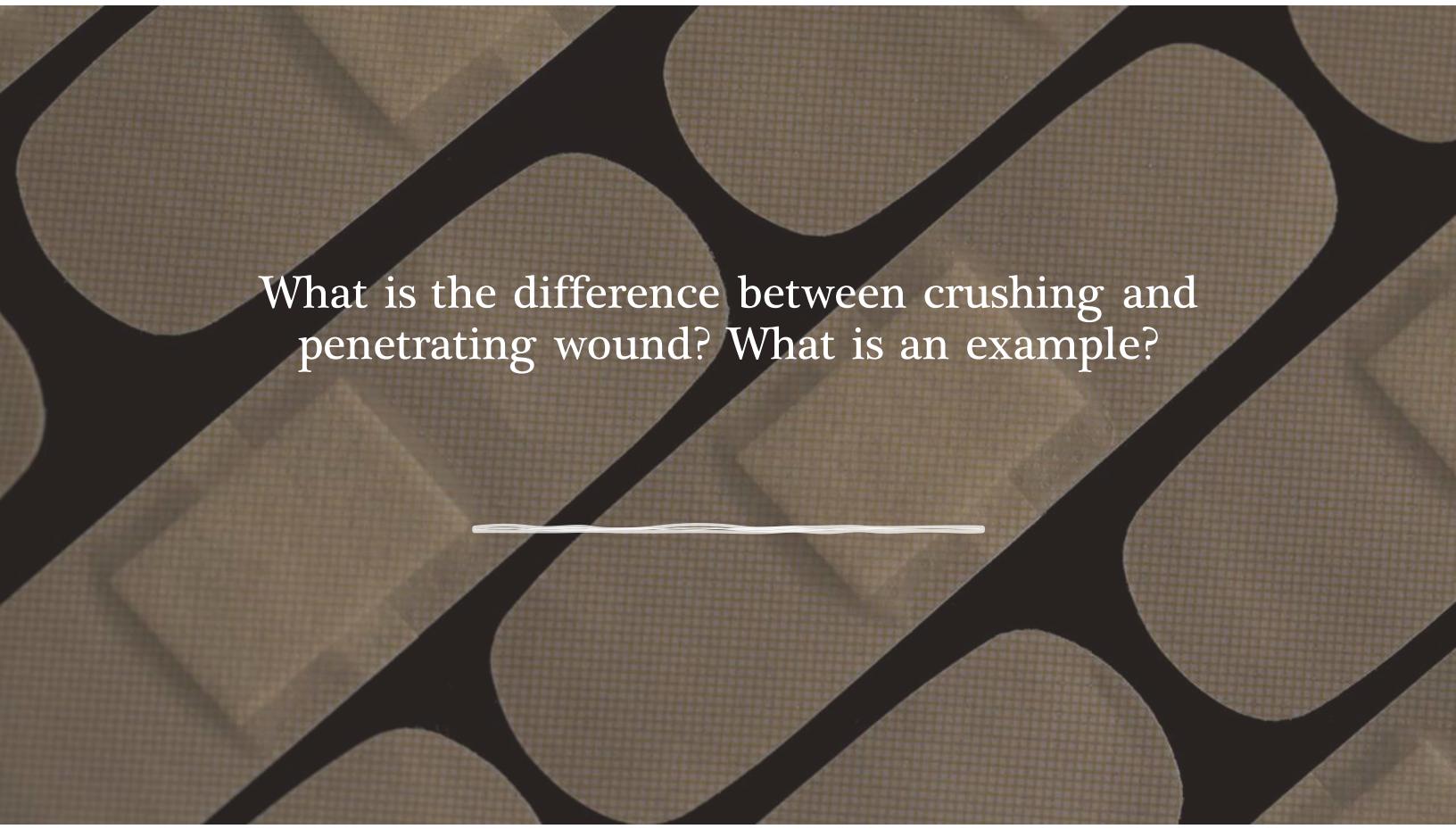
Wounds may be...

Clean

- Free of microorganisms
- Example causes:
 - Uncontaminated sharp objects
 - Surgical procedure

Dirty

- Contains microorganisms
- Example causes:
 - Contaminated object
 - Infected wound



What is the difference between crushing and penetrating wound? What is an example?

What is the difference between crushing and penetrating wound? What is an example?

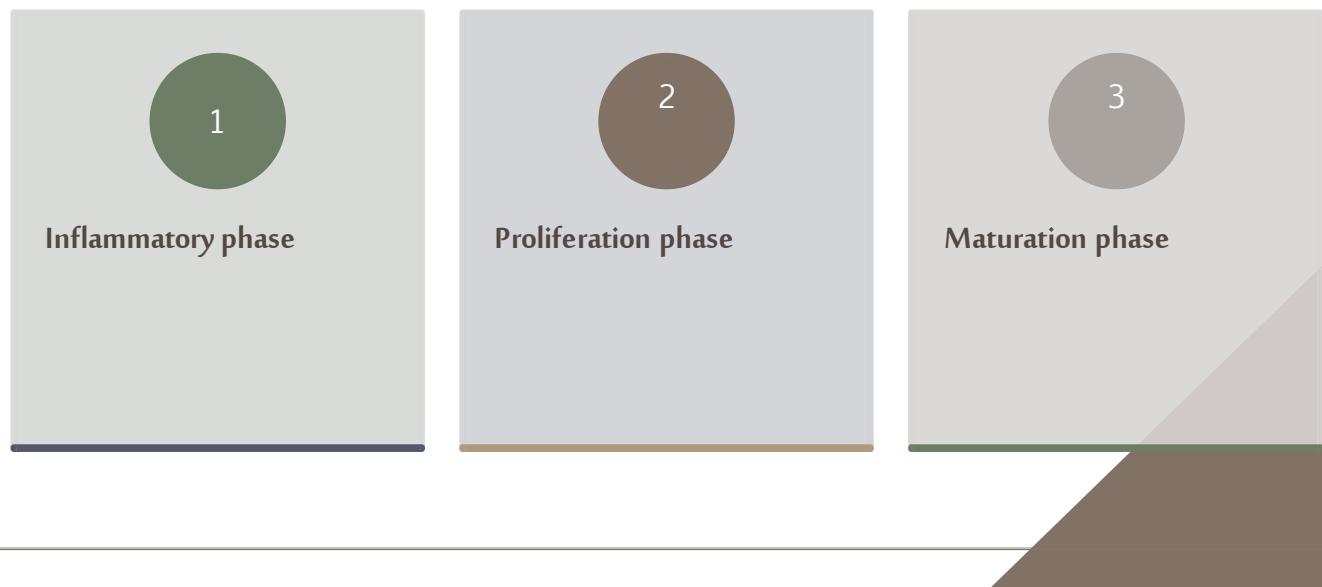
Crushing:

Penetrating:

woun

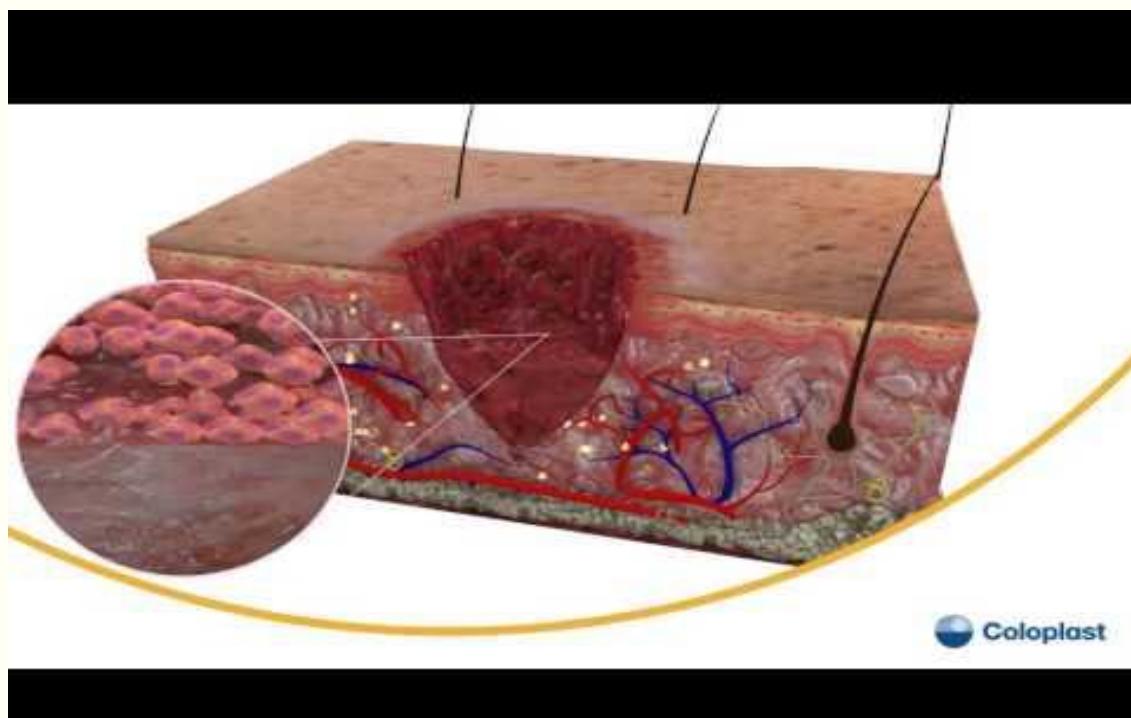
Phases of Wound Healing

Regardless of the cause... Three distinct phases wound healing



Wound Healing:

<https://www.youtube.com/watch?v=RiKu9sgFizY>



Inflammation Phase of Wound Healing

First stage of wound healing

- Begins after injury when wound is fresh
- Last 3-4 days

Stage includes:

• Hemostasis:

- Constricts blood vessels
- Platelet clumping
- Fibrin formation
- Clot & Scab forms
- 48 hours epithelial tissue forms over wound
- Phagocytes remove debris & protect against infection

Inflammation Phase of Wound Healing

Edema to injured part

Erythema (redness) resulting from the increased blood supply

Heat or increased temperature at the site

Pain stemming from pressure on nerve receptors

Possible loss of function resulting from all these changes

Clinical Signs of Inflammation

- Edema
- Erythema
- Warmth
- Pain



Proliferation Stage of Wound Healing

Begins on 3-4 day & lasts 2 to 3 weeks

Wound filled new connective tissue-scar begins to form

Macrophages-clean wound of debris, stimulating fibroblasts... causing collagen (protein in connective tissue)

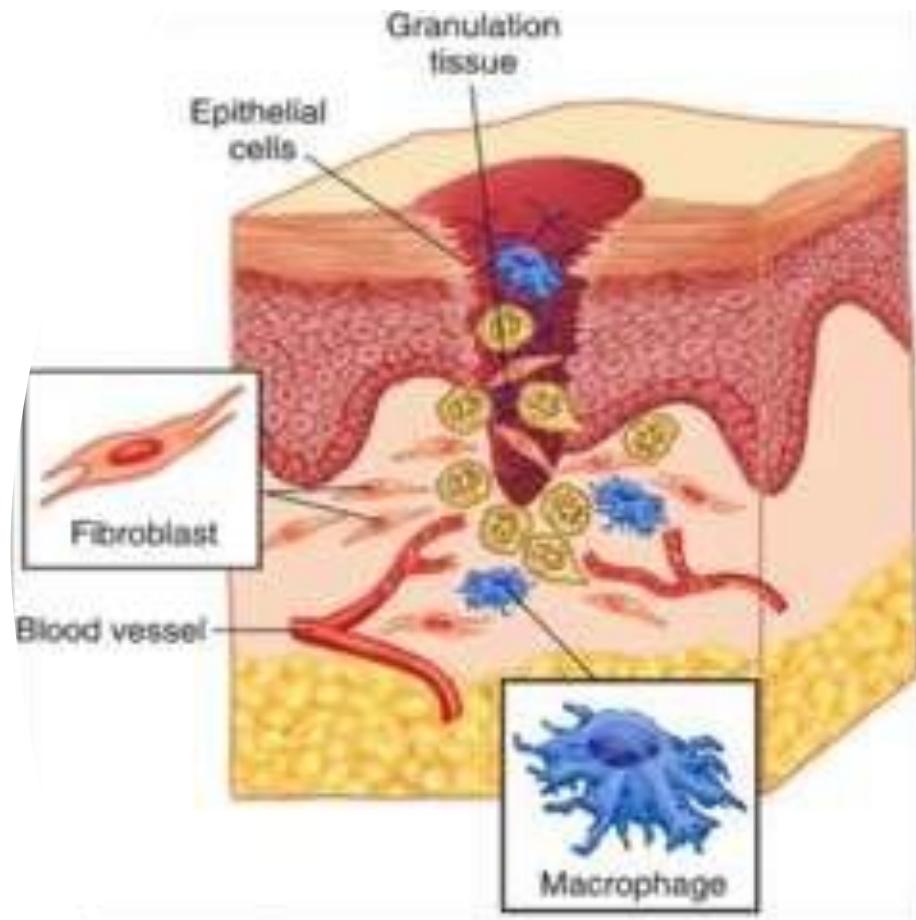
Capillary networks formed-provides oxygen/ nutrients..for collagen & granulation tissue

Tissue is deep pink

Full-thickness wound closes with scarring

Proliferation Stage of Healing

- ⑩ Wound fills new connective tissue
- ⑩ Macrophages-clean wound of debris, stimulating fibroblasts... causing collagen (protein in connective tissue)
- ⑩ Capillary networks formed- provides oxygen/ nutrients...for collagen & granulation tissue



Wound Health Maturation

Final stage of healing:

- Begins 3 weeks after injury

Macrophages **refine** collagen gives scar strength

- Scar slowly thins and lightens
- Scar finally is firm and inelastic

Contracture

- Abnormal shortening muscle tissue from scarring
- When occurs around joints
 - Restrict joint extension



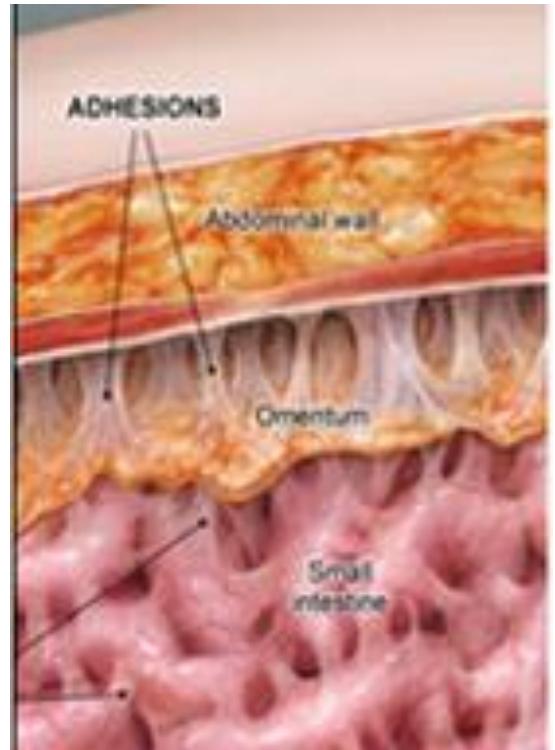
Keloid

- Overproduction of collagen results in a thick raised scar
- Most common in dark pigmented skin



Adhesions

- Fibrous bands holding tissues together normally separated
- Interferes with function of internal organs



What are
Adhesions?

https://www.youtube.com/watch?v=CQTjI_1G0GA



What is the difference between an abrasion, laceration, and a hematoma?

What is the difference between an abrasion, laceration, and a hematoma?

Abrasions: [REDACTED]

Lacerations: [REDACTED]

Hematomas: [REDACTED]

Describe the difference between Inflammatory, Proliferation, and Maturation stages.

- Describe the difference between Inflammatory, Proliferation, and Maturation stages.

- Inflammation: Begins after injury. Last 3-4 days. Hemostasis, epithelial tissue

May have

Proliferation: I
tissue-scar b
stimulating
tissue), Capill

Maturation:
injur

Healing: Primary, Secondary, Tertiary Intentions

Healing: Primary, Secondary, Tertiary Intentions

Primary intention

- Partial-Full thickness
- Edges approximate (meet)
- Slight chance of infection

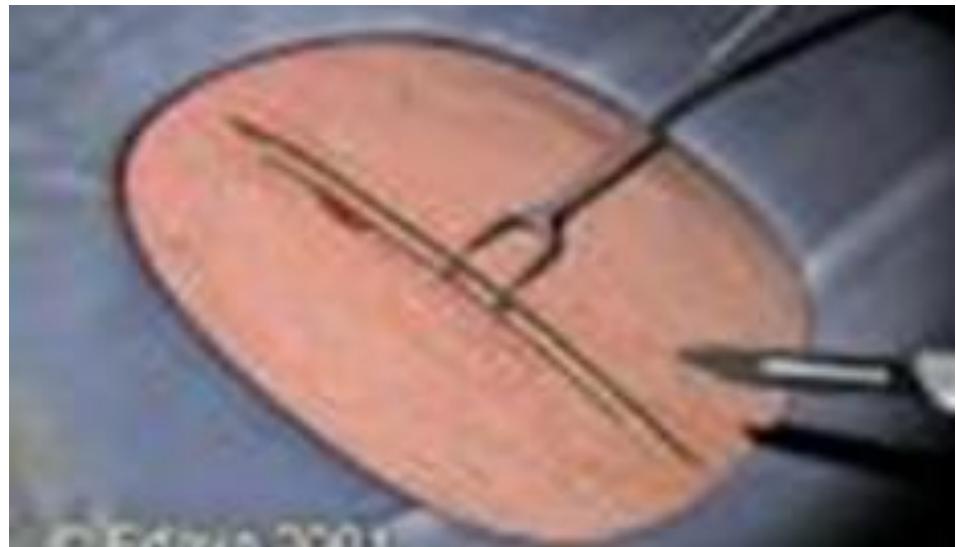
Secondary intention

- Partial-Full thickness
- Edges do not approximate
- Fills with scar tissue
- Chance of infection

Tertiary intention

- Full thickness
- Also known as delayed closure
 - Delayed suturing of wound
 - Suture after granulation tissue begins to form
 - Example—Abdominal wound left open for drainage—later closed

Healing by First Intention



- Edges approximate (meet)
- Slight chance of infection

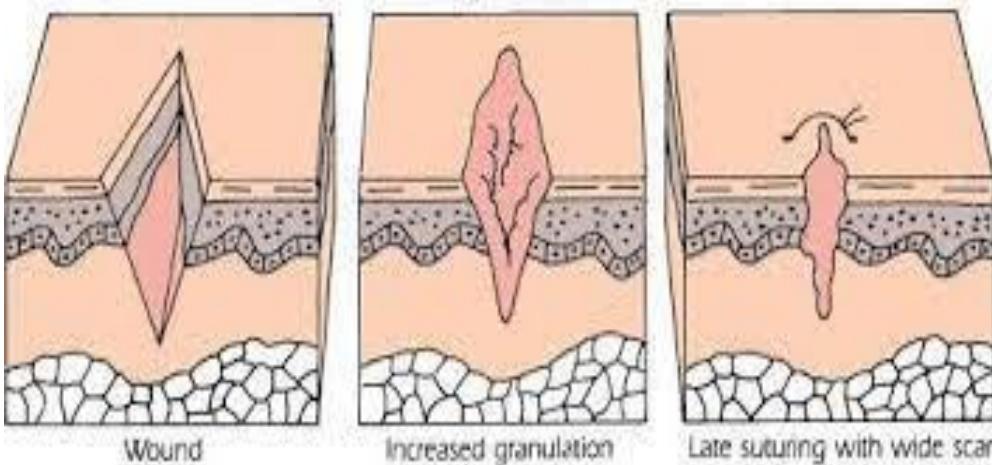
Healing by Second Intention



- Edges do not approximate
- Fills with scar tissue
- Chance of infection

Healing by Third Intention

Tertiary Intention

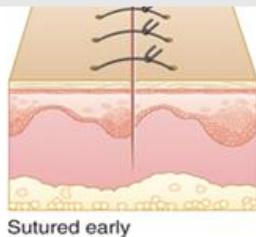
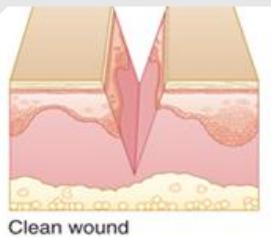


- Delayed closure - wound left open and then later sutured

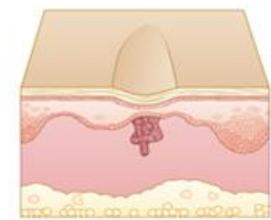
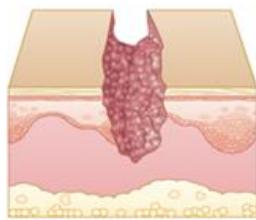
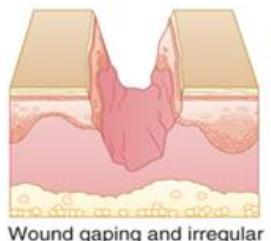
- If granulation tissue is present & no s/s of infection are noted, wound is closed

- Ex: Surgical wound left open to drain then later closed

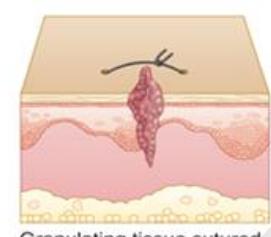
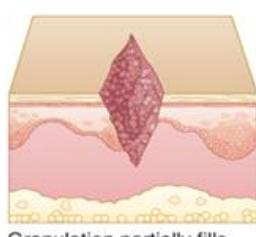
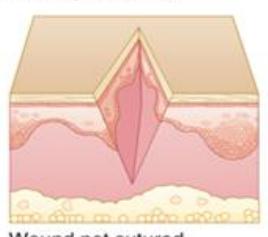
- High chance of infection



(b) Secondary intention



(c) Tertiary intention



Wound Healing

- <https://www.youtube.com/watch?v=0AIDCV9MyiQ>

Types of Wound Closure

The diagram is titled "Types of Wound Closure". It features three colored boxes on the left: a black box labeled "Primary Intention", a dark red box labeled "Secondary Intention", and a maroon box labeled "Delayed Primary Intention". To the right of these boxes is a section titled "Primary Intention" which includes an image of a sutured wound and a descriptive text box.

Primary Intention

The image shows a linear sutured wound on skin. The sutures are visible as small, dark, vertical lines across the wound site.

The simplest and fastest type of wound closure is referred to as healing by primary intention.

- Simplest and fastest type of wound closure
- Involves re-epithelialization only
- Superficial wounds
- Deeper wounds with well-approximated edges
- Lower risk of infection, minimal tissue loss,

What is the difference between primary, secondary, and tertiary intentions?

- What is the difference between wounds healing primary, secondary, and tertiary intentions?

Primary

Secondary

Tertiary

• F

Factors Affecting Wound Healing

Factors Affecting Wound Healing

Age

- Children & adults heal more quickly than elderly

Peripheral vascular disease (PVD)

- Impaired blood flow

Decreased immune system function

- Antibodies & monocytes necessary wound healing

Reduced liver function

- Impairs synthesis of blood factors

Decreased lung function

- Reduces oxygen needed to synthesize collagen & epithelium

Nutrition

- Proteins, carbohydrates, lipids, vitamins, and minerals needed for wound healing

Factors Affecting Wound Healing

Lifestyle

- Not smoking & exercising regularly will heal more quickly

Medications

- Steroids & anti-inflammatories, heparin, and antineoplastic agents interfere with healing process

Infection

- Slows healing process
- Bacterial infections often cause wound drainage-assess color, consistency, & odor

Chronic illnesses

- Diabetes, cardiovascular disease, immune system disorders may slow wound healing

Wound Complications

Complications of Wound Healing



Hemorrhage



Infection



Dehiscence



Evisceration

Hemorrhage

Risk is greatest during first 48 hours after surgery

IT IS AN EMERGENCY

Monitor all surgical clients for hemorrhage



This Photo by Unknown author is licensed under CC BY-NC

Hemorrhage

Signs and symptoms of hemorrhage

Decrease B/P

Increase pulse rate & respirations

Restlessness

Diaphoresis, cold, clammy skin

Swelling in the wound area

Sanguineous drainage in surgical drain

Hemorrhage

When assessing a dressing always look and feel beneath the patient for pooled blood

Can be caused by a slipped suture, clot, trauma to the site

Apply pressure using sterile towels, monitor VS, and notify MD

HEMATOMA

- Tissue injury with pooling of blood under unbroken skin
- May appear as swelling that is bluish red
- May place pressure on blood vessels and obstruct blood flow to tissues
- Client may have increased temperature



Wound Drainage

- Sanguineous
 - Bloody
- Serosanguineous
 - Pink/Orange
- Serous
 - Yellow/clear



Describe the difference between sanguineous, serous, and serosanguineous drainage.

- Describe the difference between sanguineous, serous, and serosanguineous drainage.

Sanguineous

- Serosanguineous

- Serous

Infection

Most common type of wound complication

Wound may be infected during surgery or postoperatively.

Traumatic wounds are more likely to become infected

Localized infection is an abscess: an accumulation of pus from debris



Complications from Infections

- **Cellulitis**- Inflammation of tissue surrounding with redness and induration (skin hardening)
- **Fistula**-abnormal passage formed between 2 internal organs
- **Sinus**-fistula leading from infected cavity to outside of body



Infection

Signs and Symptoms

- Increased pain
- Redness
- Warmth tissues
- Purulent exudate (fluid containing cellular debris)

Labs

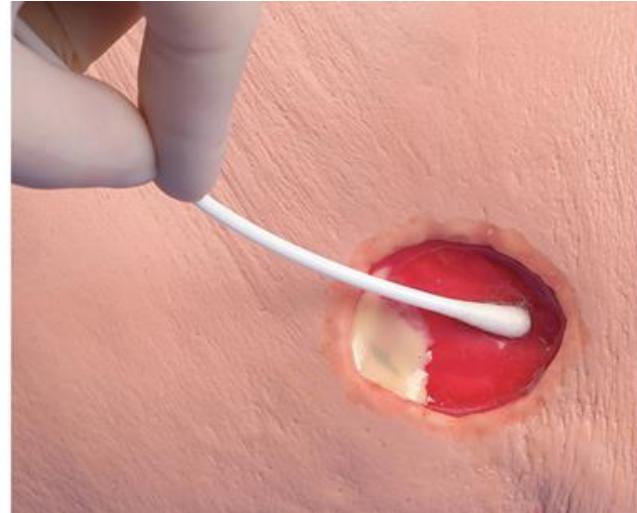
- Culture and sensitivity
- Taken from the wound exudate (fluid/drainage)
- Determine what type of organism is growing and what ABX can treat
- WBC-Elevated

Microorganisms

- Discharge-White,yellow, pink, green
- Staphylococcus aureus
- E. Coli
- MRSA (methicillin-resistant staphococcus aureus)
- Pseudomonas aeruginosa

Obtaining a Wound Culture

- Use sterile gloves
- Swirl distal end of culturette swab in the wound
- Avoid the edges!
- Send to lab



Best Way to Prevent Wound Infection...

- Maintain strict asepsis when performing wound care!
- Use Sterile instruments
- Meticulous hand washing
- Sterile gloves
- Sterile dressings
- Refrain from talking while dressing

Dehiscence & Evisceration

Dehiscence – spontaneous opening of an incision.



Evisceration – protrusion of an internal organ through the incision.



Risk Factors for Dehiscence

Greatest risk for wound dehiscence is on 4-5 post-op day...before extensive collagen has been built.

Obesity	Poor Nutrition	Mutiple Trauma
Excessive Coughing	Vomiting	Strong Sneezing
Dehydration	Suture Failure	





Evisceration

Can lead to necrosis of intestines or overwhelming sepsis

Pt may say "I feel like something just split open"

Usually occurs suddenly

Can have an increase in serosanguineous drainage before



Evisceration-Immediate Care

Supine Immediately place in supine position

Place Place large sterile dressings over the viscera

Soak Soak the dressings in sterile normal saline

Notify Notify the surgeon immediately

Prepare Prepare the patient for return to surgery-NPO



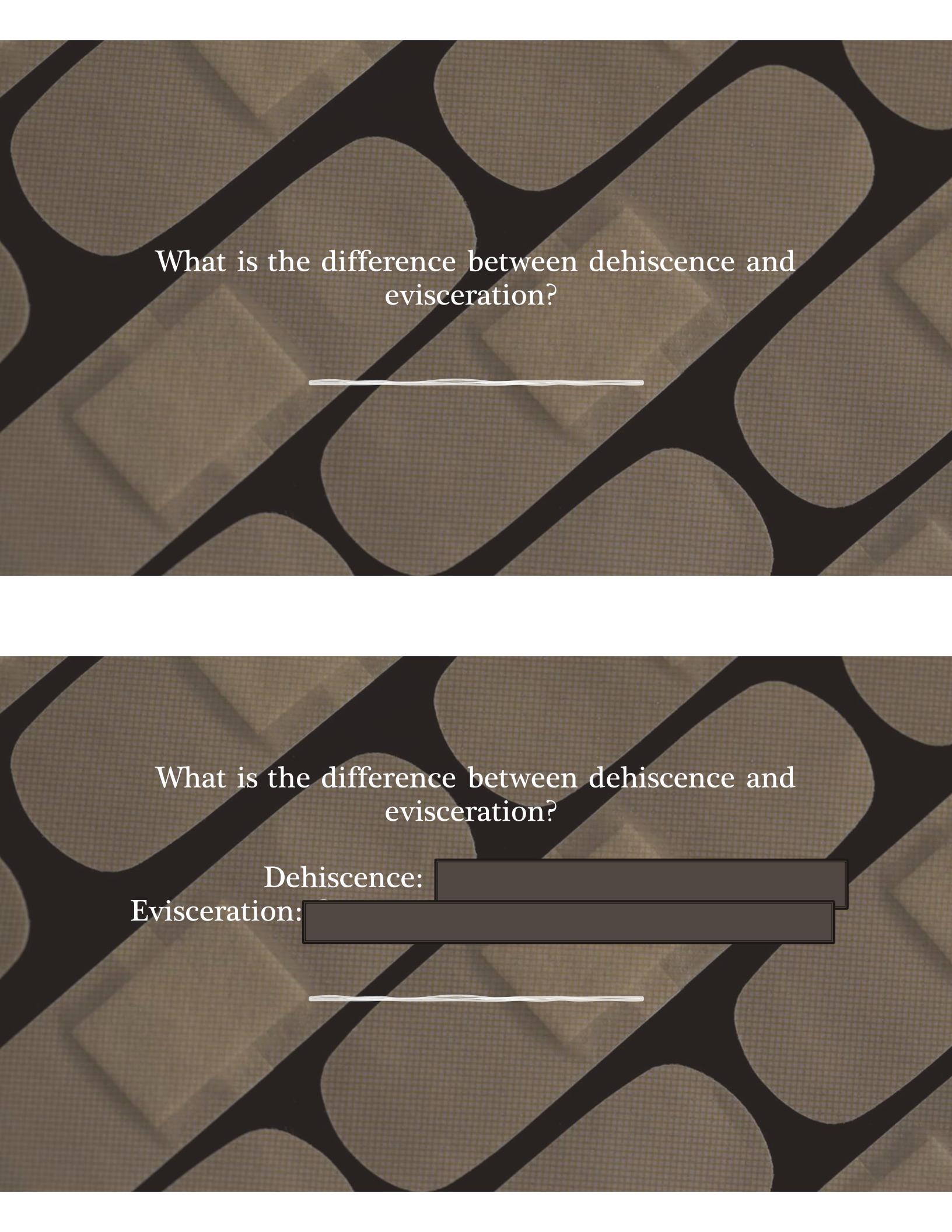
Describe signs and symptoms of hemorrhage.

Describe signs and symptoms of hemorrhage.



Describe signs and symptoms of an infected wound.

- Describe signs and symptoms of an infected wound.



What is the difference between dehiscence and evisceration?

What is the difference between dehiscence and evisceration?

Dehiscence:

Evisceration:

Client is experiencing wound dehiscence. What are the immediate actions to take?

- Client is experiencing wound dehiscence. What are the immediate actions to take?

-]

Treatment of Wounds: Wound Closures

WHAT KIND OF
BANDAGE DO
YOU USE ON A
DUCK THAT HAS
AN INJURY?



Wound Closures

Sutures and staples

Silver wire clips

Large retention sutures

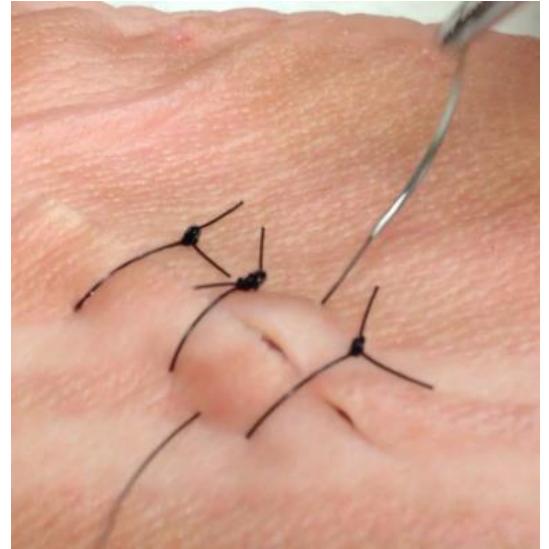
Steri-Strips

Dermabond



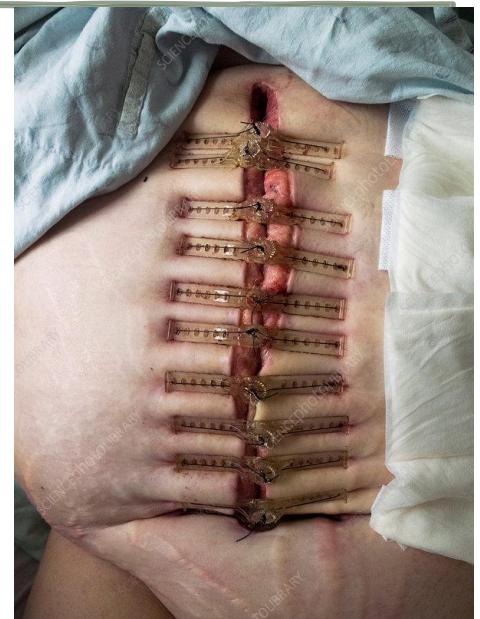
Sutures

- Hold the edges of the wounds together until it can heal
- Suture that are used to attach tissues beneath the skin are absorbed and not removed
- Made from silk, cotton, linen, wire, nylon, or Dacron



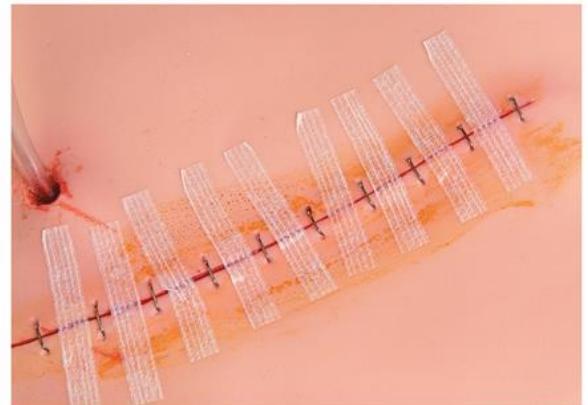
Retention Sutures

- Used to take some of the pressure off other sutures
- Wound does not pull open as it is healing
- Usually used after abdominal surgeries in patients who are overweight or who may suffer from a distention of the abdomen due to swelling or disease



Steri-Strips

- Small reinforced adhesive strips that hold the wound edges together
- Often applied after sutures/staples are removed



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Staples

- Hold edges of the wound together
- Removed after 7-14 days



shutterstock.com • 2005494

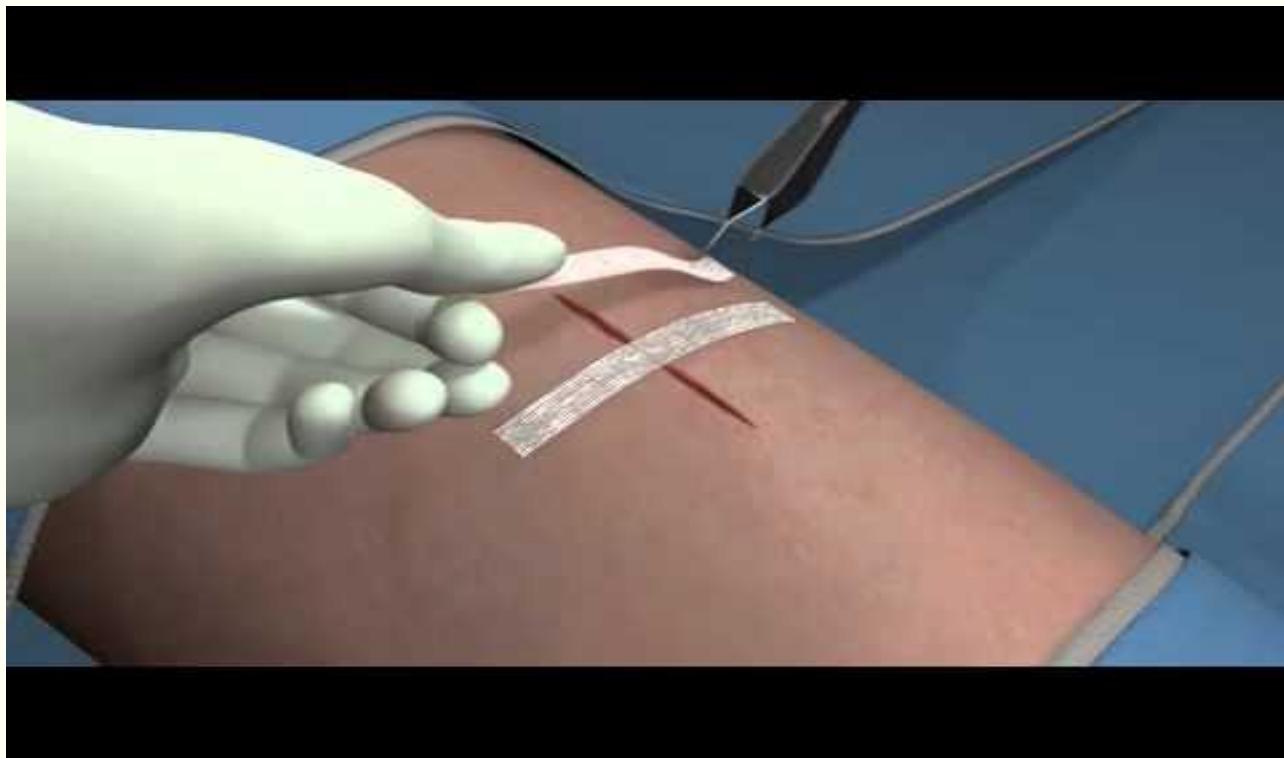
Dermabond (Surgical Adhesive)

- Noninvasive glue
- Provides a seal without needing a dressing
- Used in place of sutures.
- Comes off in 7-10 days.
- Do not use on mucous membranes.





https://www.youtube.com/watch?v=_M_rDhPVIMY



<https://www.youtube.com/watch?v=C5m0CYCt59E>

What is the difference between routine sutures
and retention sutures?

- What is the difference between routine sutures
and retention sutures?

Open Wound Classifications

Open Wound Classifications

Red wounds

Yellow wounds

Black wounds



Open Wound Classification- Red

- Clean, ready to heal
- Protect the wound!



Open Wound Classification- Yellow

- Layer of yellow fibrous debris or exudate
- Sloughing
 - Natural shedding of dead tissue
- May cause drainage
- Needs to be cleaned often
- Dressing needs to absorb drainage
- Watch for infection!!



Open Wound Classification- **Black**

- Needs debridement (removal of unhealthy tissue)
- Eschar-Dead tissue
- Won't heal until debrided



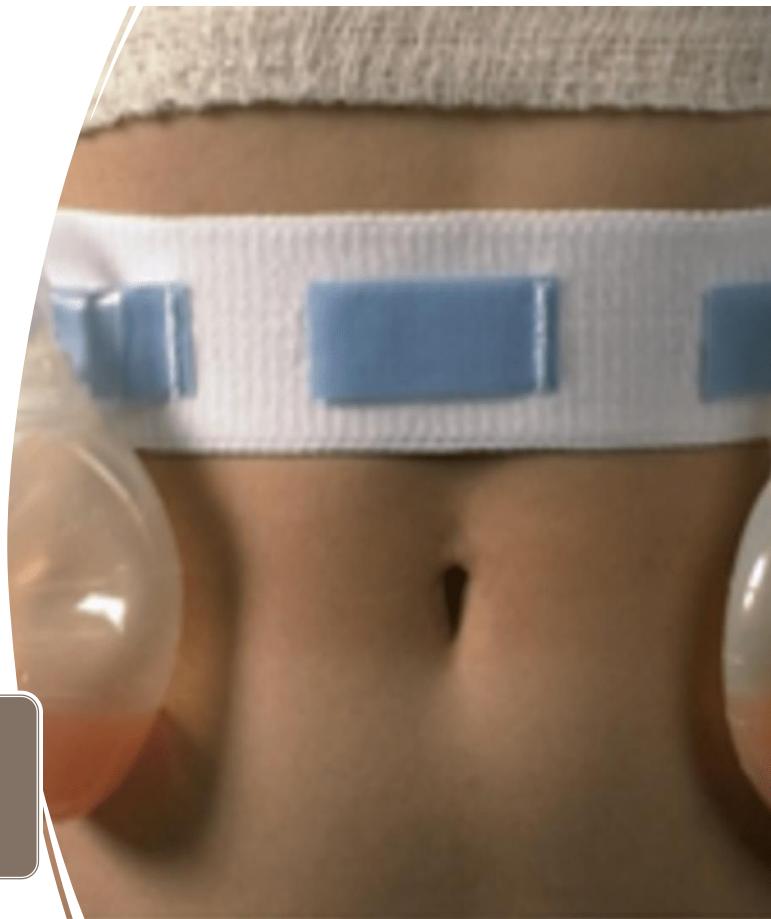
Wound Drains

Drains and Drainage Devices

Provide an exit blood/fluids accumulated during the inflammatory process

Passive-Drain-Penrose

Active- Hemovac,
Davol, and Jackson-Pratt



Active Versus Passive Drains

Active

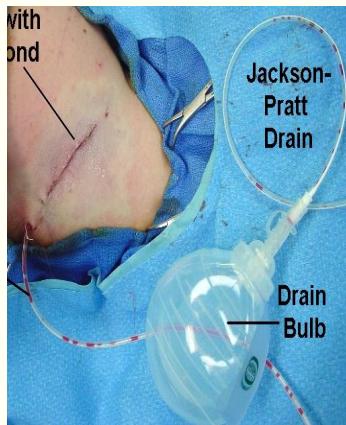
- **Uses suction**
- Attached to a suction collection device
- **Works by compressing device**
- Types:
 - Jackson-Pratt (JP drain)
 - Hemovac
 - Davol

Passive

- **No suction**
- Works by increased pressure inside wound
- **Drains by gravity**
- Type:
 - Penrose Drain

Active Drains-Jackson-Pratt, Hemovac, Davol

Jackson Pratt



Hemovac



Davol



Passive Drain-Penrose

Passive- Penrose





<https://www.youtube.com/watch?v=DeC3JAO-MSM>



<https://www.youtube.com/watch?v=xDv1D2c8eLY>

NURSING CARE FOR DRAINS

• Empty drains

- Every end of shift
- When $\frac{1}{2}$ to $\frac{2}{3}$ full
 - Do not wait until it is full...suction will not work
- Compress to facilitate suctioning
- Document Intake and Output every shift
- Clean spout and plug with alcohol swab



What is the primary difference between an active and passive drain?

What is the primary difference between an active and passive drain?



Name a passive drainage system. Name active drainage systems.



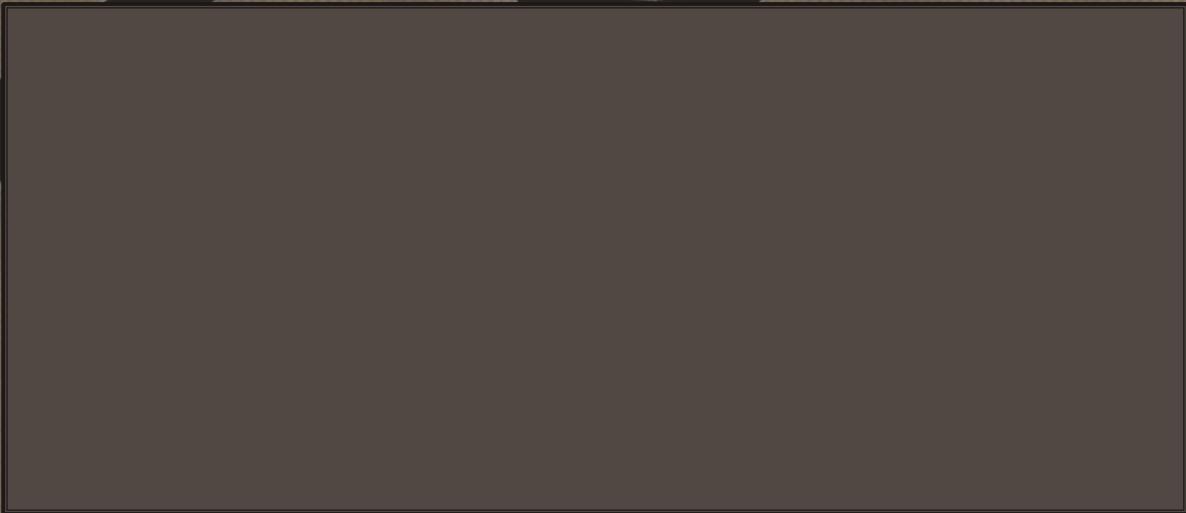
Name a passive drainage system. Name active drainage systems.



What are essential nursing tasks when caring for a drain?



- What are essential nursing tasks when caring for a drain?



Debridement

— Debridement

Removing necrotic tissue- healing can occur

Sharp Debridement-Provider

- May be performed with scissors, scalpel, forceps
- Use sepsis cellulitis
- Wound may bleed after
- Can be painful

Enzymatic Debridement-Nurse

- Using an enzyme to liquefy dead tissue
- Placed in wound then dressing placed over
- Useful uninfected wounds

Sharp Debridement-Provider



<https://www.youtube.com/watch?v=7ewnTy8jKbw>

Enzymatic Debridement



https://www.youtube.com/watch?v=t0_Sp2qqiAg

Debridement

Mechanical Debridement

- Physical removal debris
- Types:
 - Irrigation or hydrotherapy
 - Whirlpool or ultrasound mist
 - Microscopic bubbles, sound waves
 - Wet to dry dressing.
 - Tissue sticks to dressing
 - Cells are pulled off
 - Not recommended any longer

Debridement

Autolytic Debridement

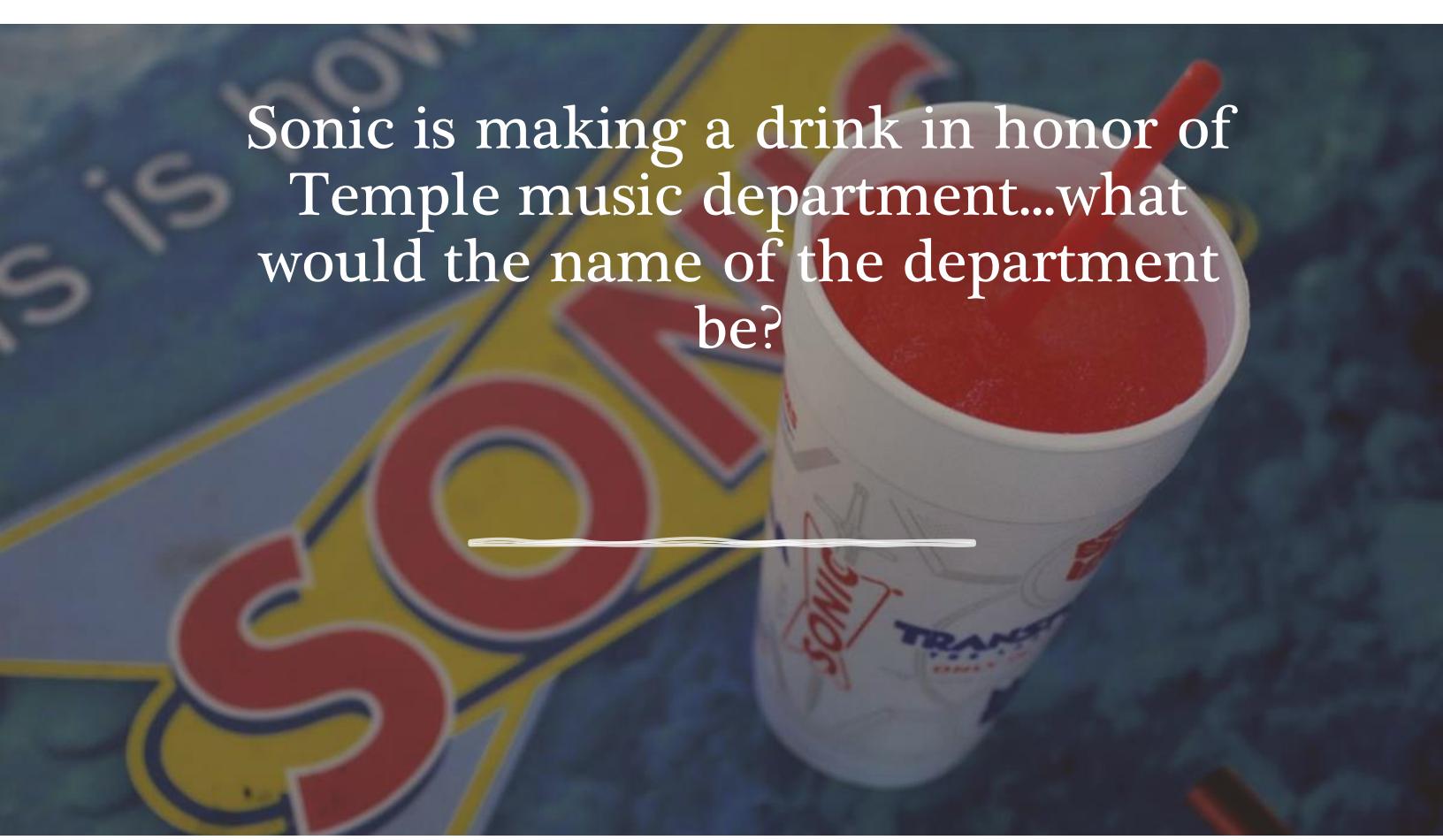
- Longer process
- Uses body's own enzymes break down the tissue
- Use on small, uninfected wound-
- Dressings that promote moist environment — hydrogels, hydrocolloids, transparent films — support moisture retention and assist in debridement

Debridement

Chemical Debridement

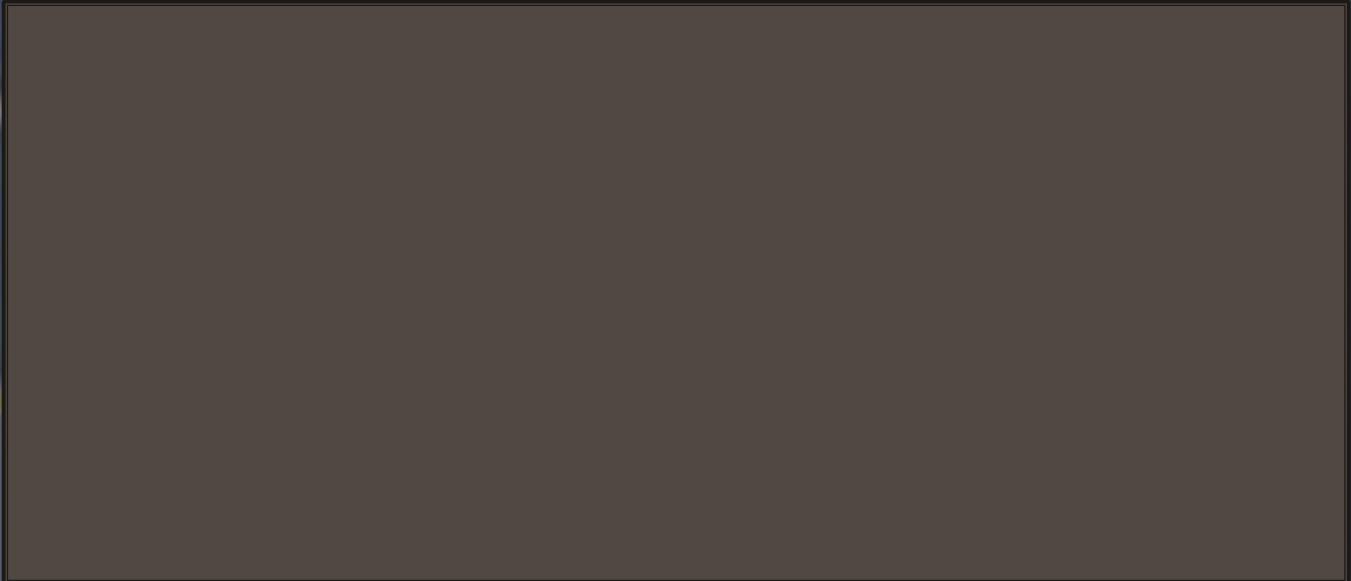
- Use when necrotic is not responding to other txrt
- Dakin solution (bleach and peroxide) or sterile maggots

Dressings



Sonic is making a drink in honor of
Temple music department...what
would the name of the department
be?

Skin is making a drink with some of



Purpose

- Protective coverings placed over wounds
- Prevent microorganisms from entering the wound
- Absorb drainage
- Control bleeding
- Support and stabilize tissues
- Reduce discomfort



Gauze

Absorbent Material

Used for wet-to
damp dressings

Varies sizes
Sizes vary:

2X2

4X4

4X8



Kerlex Fluff Gauze

Absorbent Material

Used for wet-to
damp dressings



Non-Adherent Gauze

Shiny, coated gauze

Doesn't stick to wound

Good choice for fragile skin

Causes less trauma when removed

Example: Telfa



Abdominal Pads

- Used to cover gauze
- Hold the dressing in place
- Line goes on the outside



Occlusive Dressings

Wounds heal faster when kept moist

Occlusive dressings keep wound moist while protecting from contamination

Used for chronic or hard-to-heal wounds



Transparent Film Dressing

Clean wounds without drainage or infection!

Can be used to hold other dressings in place/IV

In place for 3-7 days

Example: Tegaderm



Hydrocolloid

Not for use on infected wounds!

Keeps moist wounds moist

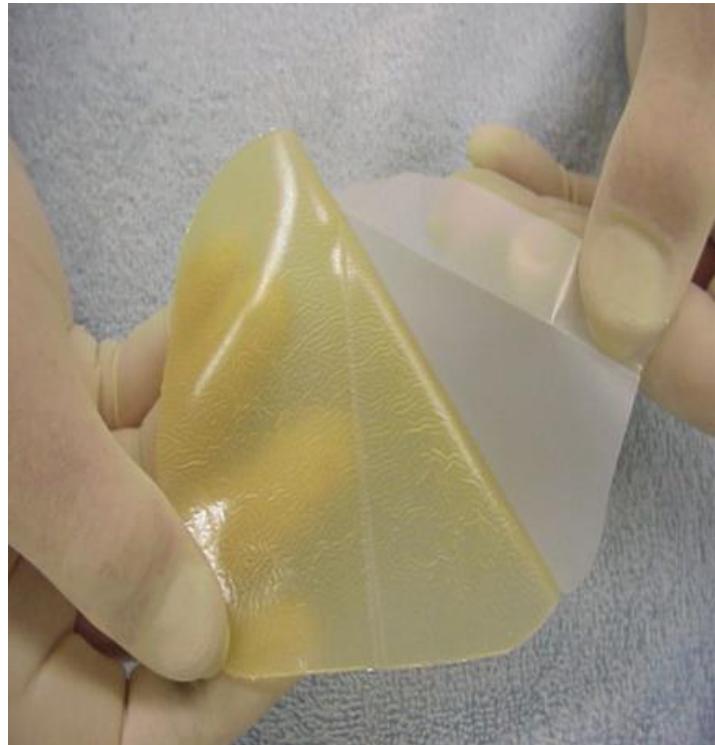
Don't use on heavily draining wounds

In place 3-5 days

Facilitates autolytic debridement

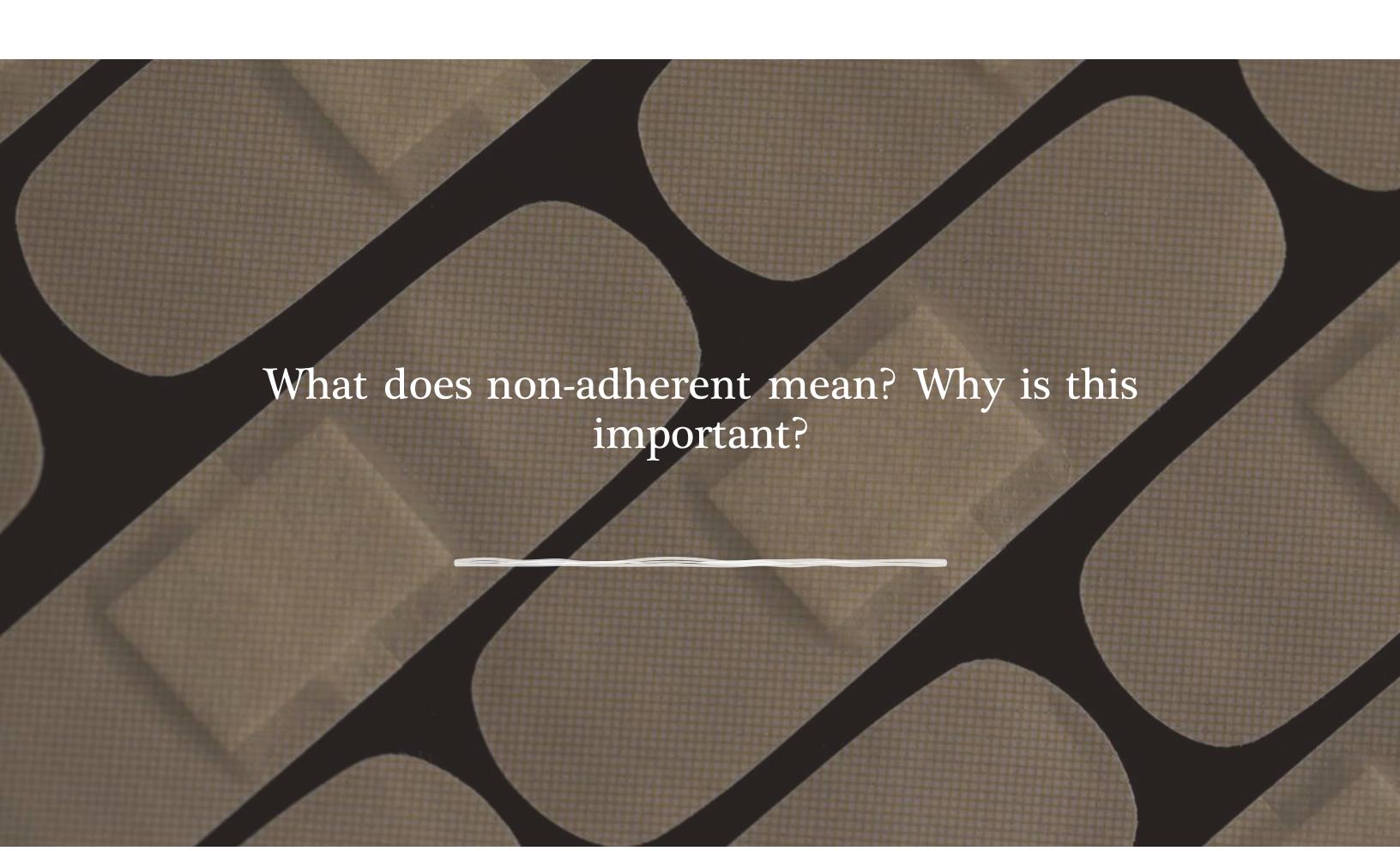
Provides thermal insulation

Example:
DuoDERM

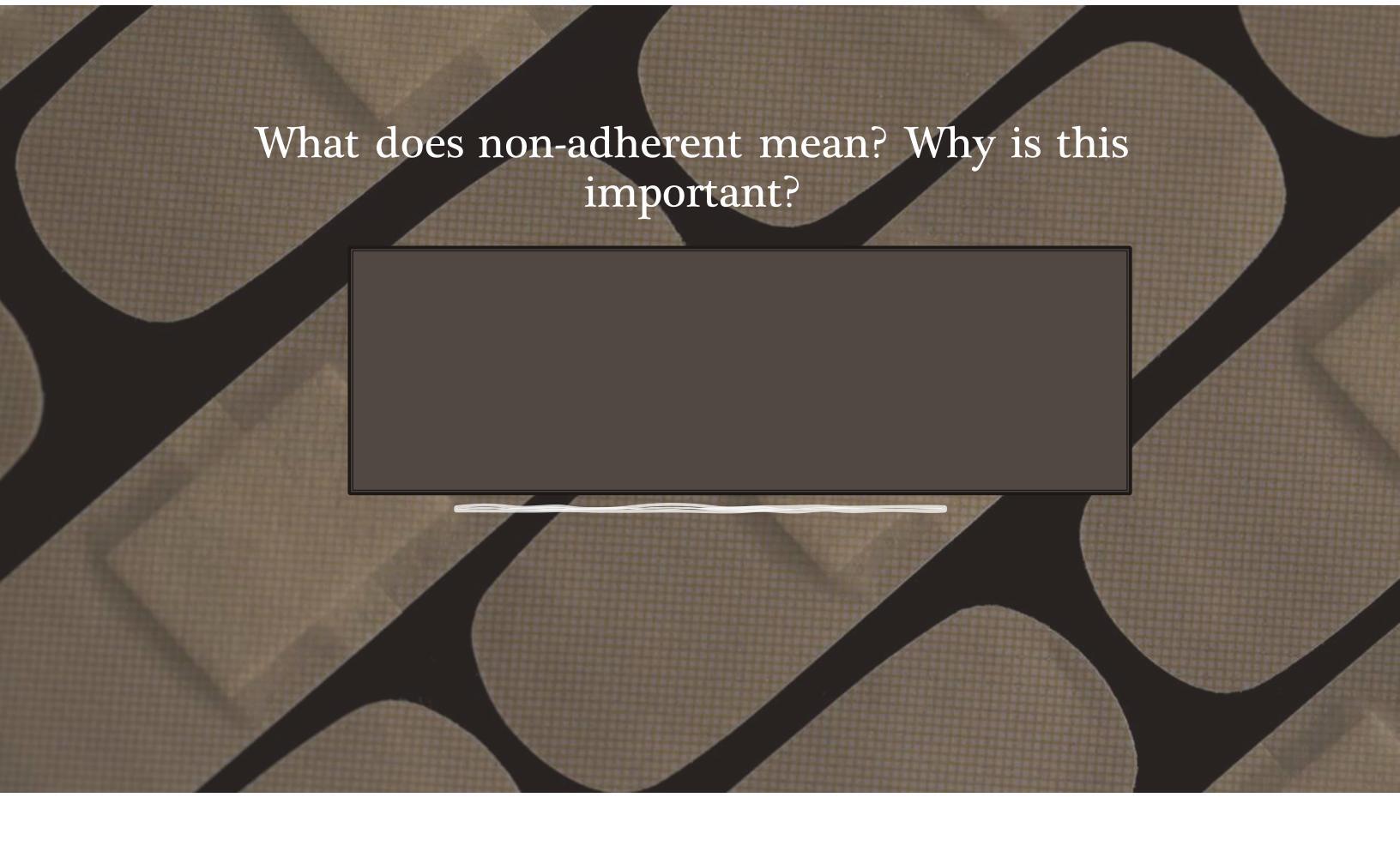


Hydrogel Dressings

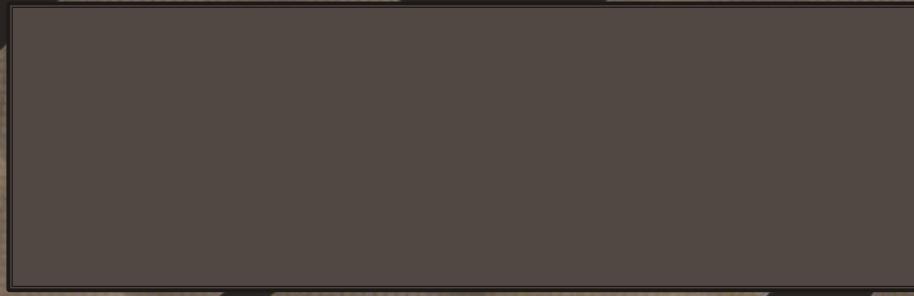




What does non-adherent mean? Why is this important?



What does non-adherent mean? Why is this important?



Name a dressing that encourages a wound to remain moist? What if wound is infected or large amount of drainage?

Name a dressing that encourages a wound to remain moist? What if wound is infected or large amount of drainage?





Mrs. Bone's New Bicycle



Mrs. Bone Accident

Mrs. Bone's List of Wounds

traumatic scraping away of skin layers



tissue injury with damage to blood vessel. Causes a mass like appearance



bruise: tissue injury normally seen on the skin



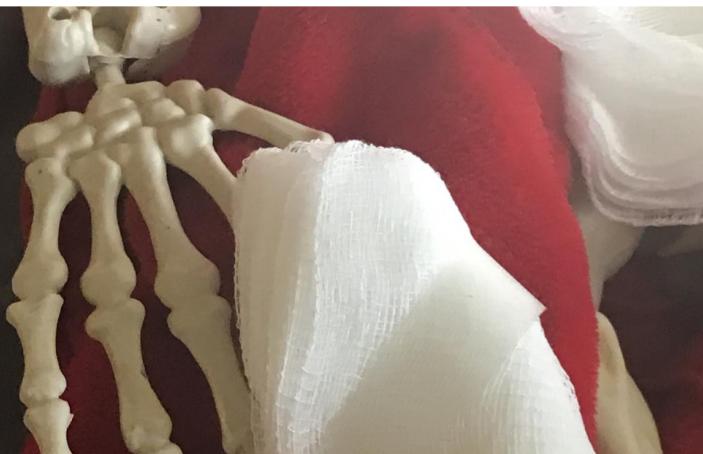
traumatic torn edges



excavation of tissue from injury



tearing away of structure or part, such as a fingertip



Mrs. Bone's List of Wounds

- Abrasion-hand
- Ulceration-foot
- Avulsion-fingertip
- Contusion-head
- Deep Laceration to her abdomen
- Hematoma-knee

Mrs. Bone Walking in Hallway

- Mrs. Bones has surgery, including repair to her lacerated abdominal area. She is ambulating in the hallway and says "Help help! Something has just split open!"
- What do you think may have happened? What is she now at risk for?



Mrs. Bone Walking in Hallway

- Mrs. Bones has surgery, including repair to her lacerated abdominal area. She is ambulating in the hallway and says "Help! HELP! Something has just split open!"
- What positions should you immediately place Mrs. Bones in?
- Sit her up straight on the couch?



Mrs. Bone Walking in Hallway

- Mrs. Bones has surgery, including repair to her lacerated abdominal area. She is ambulating in the hallway and says "Help help! Something has just split open!"
- What positions should you immediately place Mrs. Bones in?
- Tell her to call Mr. Bones?



Mrs. Bone Walking in Hallway

- Mrs. Bones has surgery, including repair to her lacerated abdominal area. She is ambulating in the hallway and says "Help help! Something has just split open!"
- What positions should you immediately place Mrs. Bones in?
- Tell her to place her hands over her abdomen to keep her intestines inside?

Mrs. Bone Walking in Hallway

- Mrs. Bones has surgery, including repair to her lacerated abdominal area. She is ambulating in the hallway and says "Help help! Something has just split open!"
- What positions should you immediately place Mrs. Bones in?
- Immediately place her in a supine position.



Mrs. Bone Post-Op Care

- Monitoring Mrs. Bone's vital signs and conditions, which one of the following would be most concerning?
- Paleness, rising pulse rate, lowering blood pressure
- Oriented, rising pulse, normal blood pressure
- Pain, normal pulse, rising blood pressure
- Laughing, normal pulse, normal blood pressure



Mrs. Bone Post-Op Care

- Assessing Mrs. Bone's wound, you notice red granulation tissue. What would be your response?
- Tissue is about to become infected
- Tissue is about to hemorrhage
- Tissue is infected
- Tissue is healing



Mrs. Bone Post-Op Care

- You are caring for Mrs. Bone during her Post-Op care. You know she is most at risk for hemorrhage during what timeframe?
- First 24 hours
- First 48 hours
- First 72 hours
- First 96 hours



Mrs. Bone Post-Op

Care

- Mrs. Bones' Provider noted an infection in her wound and is going to perform a sharp debridement. What education will you share with Mrs. Bones?
- You will be performing the procedure
- An enzymatic solution will be applied to her wound
- A Dakin solution will be used
- Wound may bleed afterwards

Securing dressings



Dressing may be secured with:
Tape, stretch roller gauze Stretch
gauze- (Conform, Kerlix, Kling)
Mesh netting
Elastic bandage
Montgomery straps
Binders

Securing a Dressing

Elastic tape or bandages provide pressure

Stretch gauze and mesh netting allow movement

Montgomery straps allow changing dressing without removing tape



Montgomery straps

Used for frequent dressing changes

Adheres to each side of the wound and dressing is “tied” on.



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Tape Application

Types of Tape

- Silk
- Paper
- Cloth

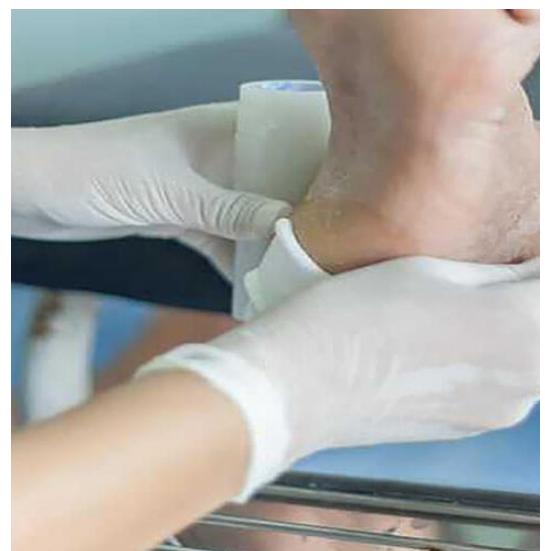
Do not apply

- Over broken or irritated skin

Removing

- Pull parallel to skin surface TOWARDS the wound

Check for allergies!



Tape Application

Place tape

- To adhere to intact skin

Tape should be

- Long and wide enough to adhere firmly to intact skin
- Placed ends of the dressing

Place tape

- Opposite to body action in the wound location.
- Across a joint or crease

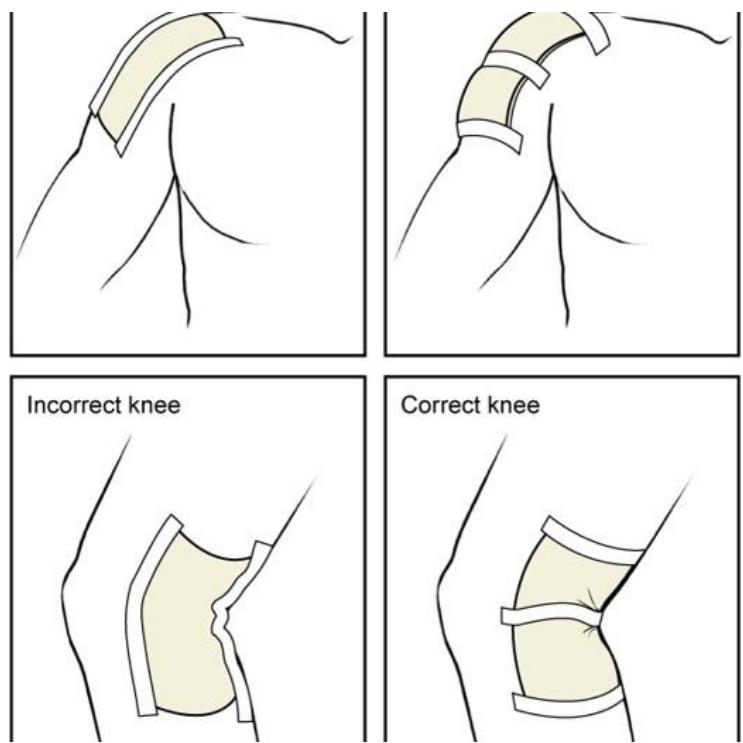
Turn tape

- Under the end, leaving a tab for easy removal



Correct tape
across a joint or
crease

Allows for
movement



Clean Dressing Change



<https://www.youtube.com/watch?v=otHmSV8nC9s>

Binders

Decreases tension around wound or suture line

Adds comfort

Holds abdominal dressing in place

Made of elastic and velcro

Applies pressure to site



Negative Pressure Wound Therapy

Vacuum Assisted Closure (WOUND VAC)

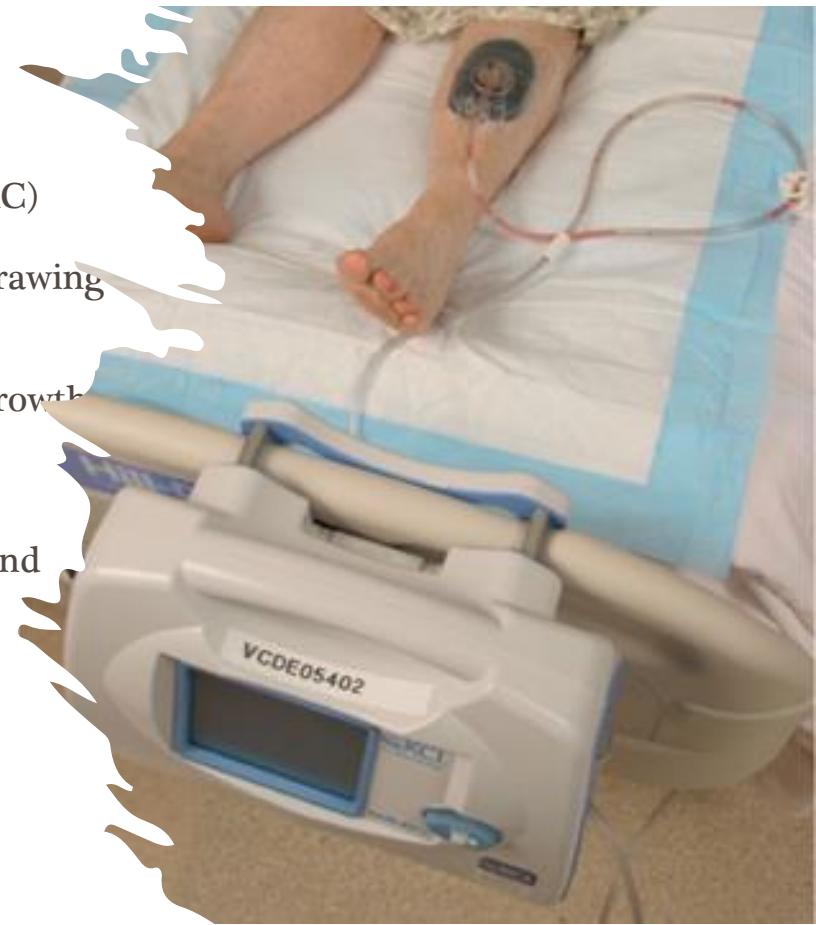
Suction device creates negative pressure drawing edges together

Stretches cells increasing cell and tissue growth

Removes fluid from wound

Increases blood flow-increases oxygen and nutrients to wound

Keeps wound moist



Negative Pressure Wound Therapy

Dressing changes:

Infected wound- every 12-24 hours
Clean wound- 3 times a week

Do not use:

Bleeding, exposed organs, exposed blood vessels or nerves, malignant tissue





Mrs. Bone Walking in Hallway

- Mrs. Bones says, I am scared my wound is going to open up again. She asks if there is anything she can use to decrease tension around her incision and increase her comfort. You consider what type of support?



Mrs. Bone Post-Op Care

- Following Mrs. Bones debridement, she is to have frequent dressing changes. To decrease tape irritation by frequent removal and applications, what dressing could you consider using?



Mrs. Bone Post-Op

Care

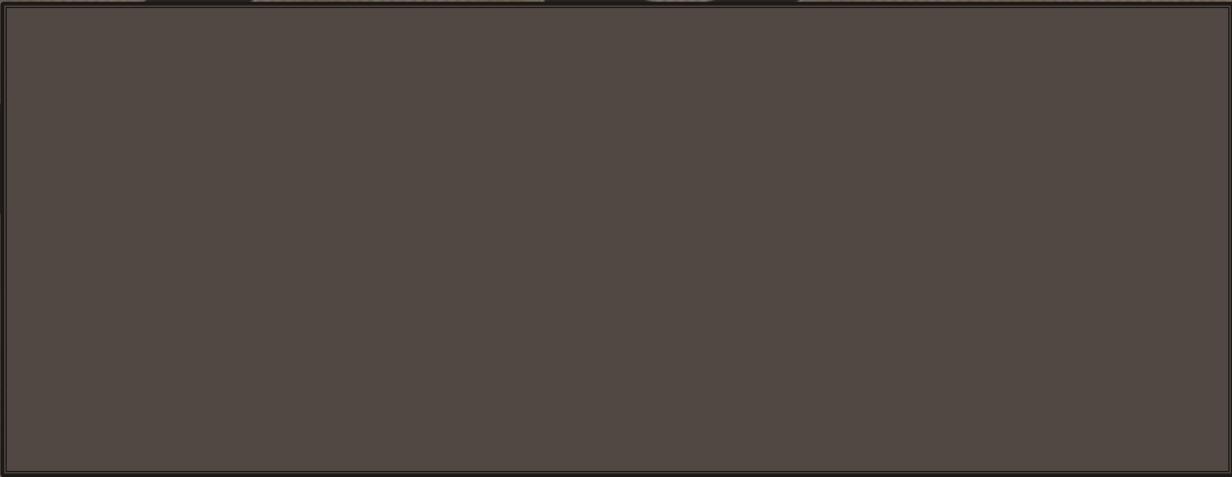
- Mrs. Bone is being seen at her 6 week post-op appointment. You notice her surgery scar is thick, raised with dark pigmentation. Your findings reveal
- Normal healing-all scars look this way
- Keloid has formed
- Concerned wound is about to open up
- Wound is infected



Mrs. Bone Has
Healed and
Ready to Go
Shopping for a
New Bicycle

What is the purpose of an abdominal binder?

What is the purpose of an abdominal binder?

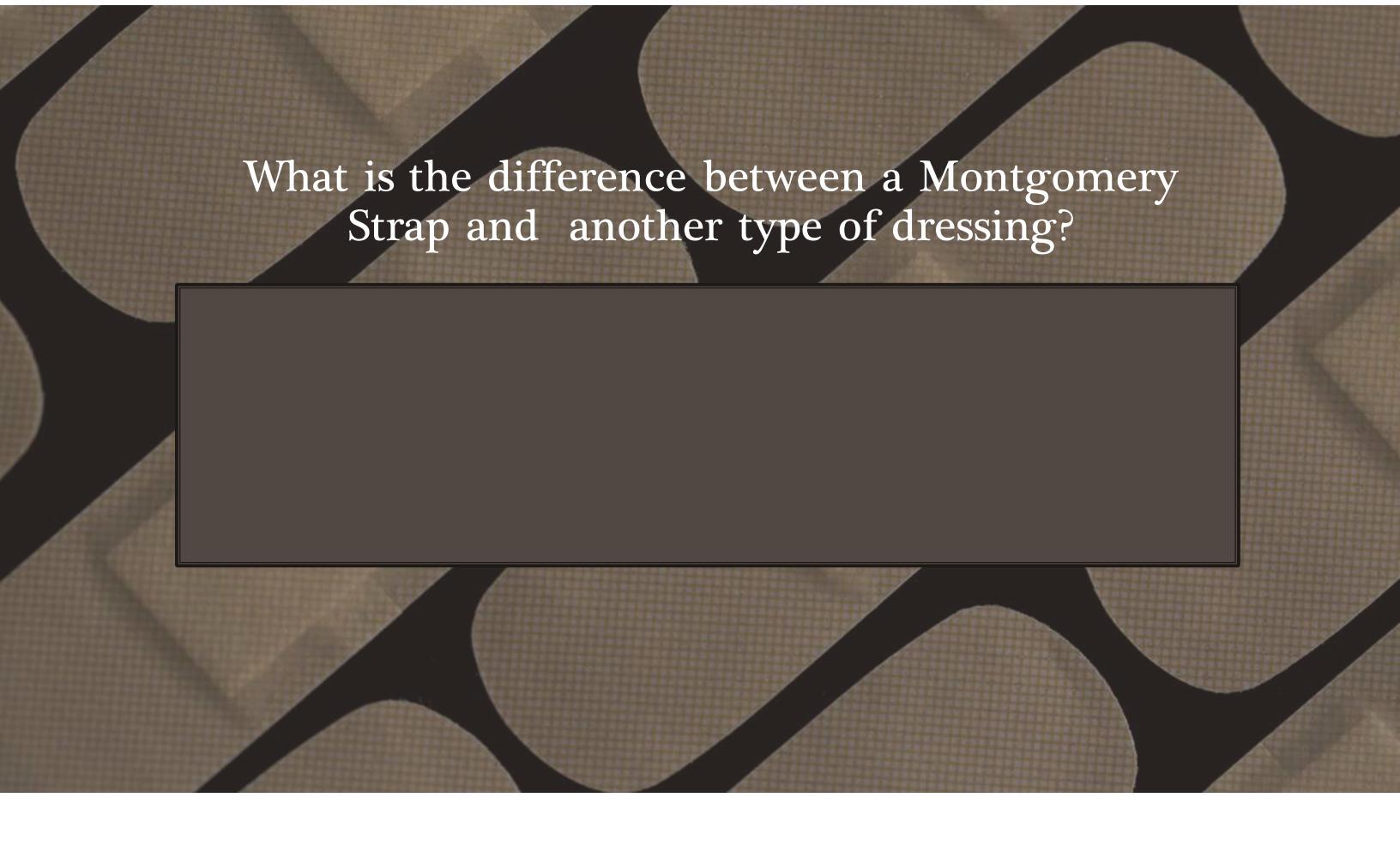


You are to remove a dressing. What direction should you pull to remove the tape from the old dressing?

You are to remove a dressing. What direction should you pull to remove the tape from the old dressing?



What is the difference between a Montgomery
Strap and another type of dressing?

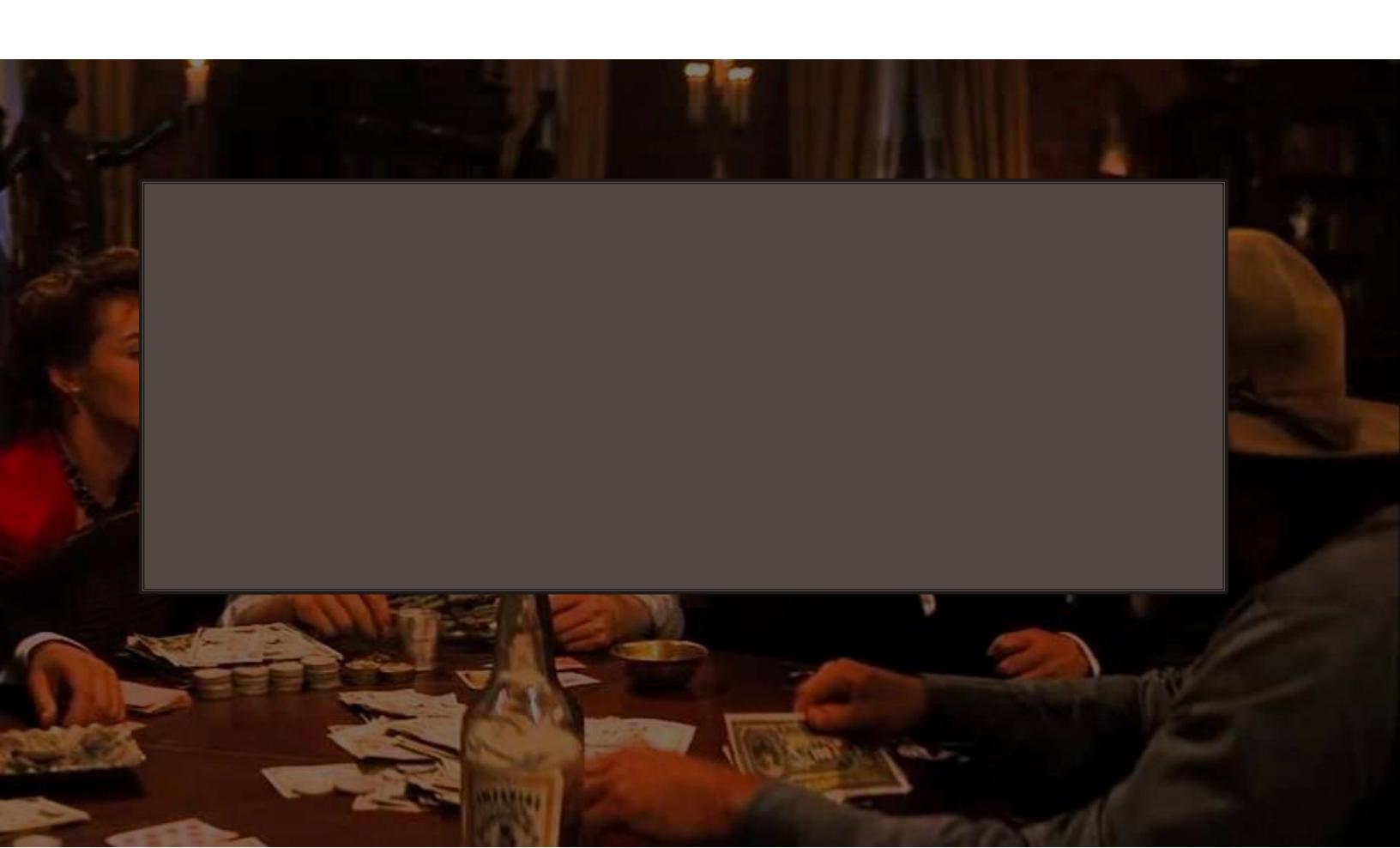


What is the difference between a Montgomery
Strap and another type of dressing?

Treatment of Pressure Injuries or Vascular Ulcers

A photograph of a group of people playing cards at a table. There are four visible players: a woman on the left, a man with a mustache in a vest, a man in a suit, and a person in a hat on the right. The table is cluttered with cards, money, and a bottle. The scene is set in a dimly lit room.

What bandage is worn by most
card players?

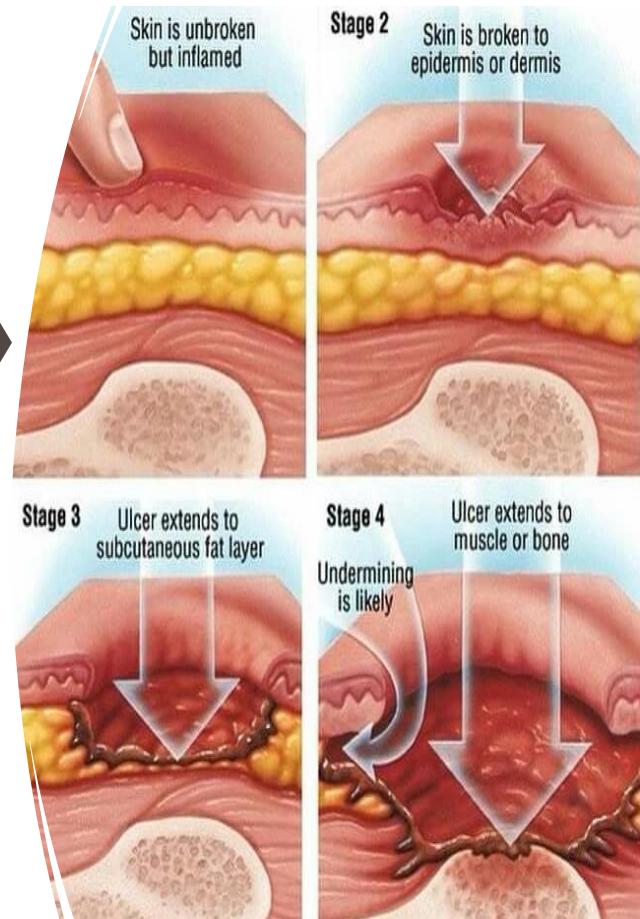
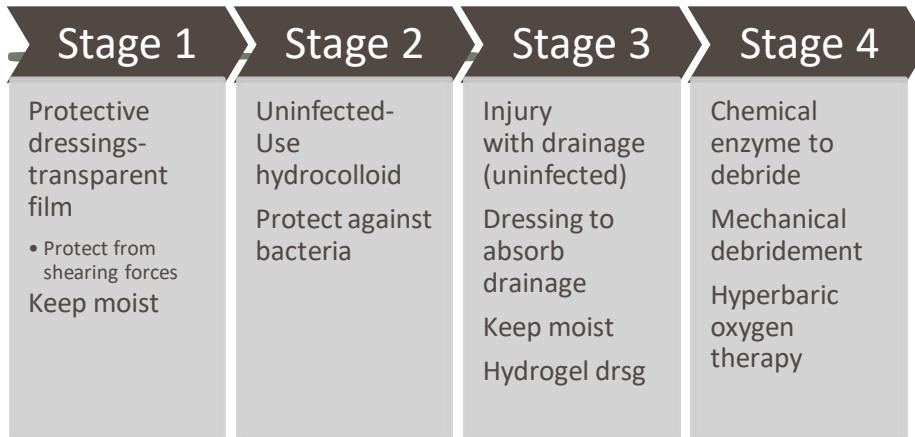


Cleaning Ulcers or Pressure Injuries

- Clean at each dressing change
- Irrigate with syringe and water, saline, nontoxic cleanser
- Pressure of irrigation-do not damage new granulation
- Use 250-500 ml-include tunnels
- Observe and document
- Cover wound dressing according to characteristics



Pressure Injuries Stages



Nursing Process

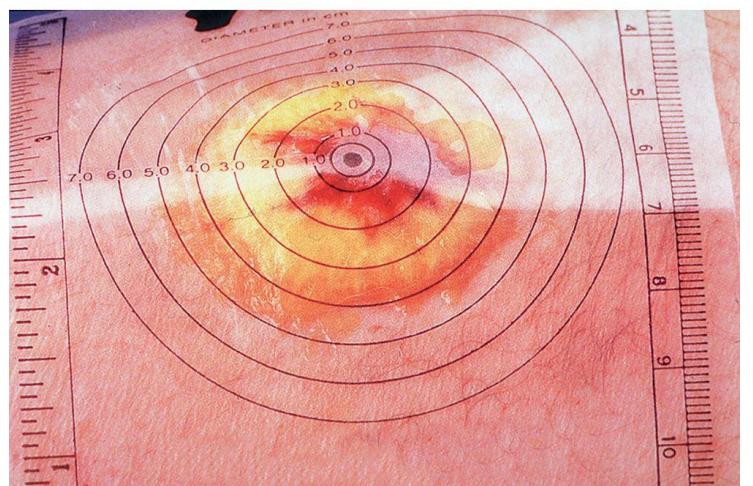
Assessment

- Document the location and appearance of the wound daily
- During wound care:
 - Amount of drainage on the wound
 - Scant, small, moderate, large
 - Color of the drainage
 - Swelling
 - Odor
 - Pain
 - Approximation (degree of closure)
 - Warmth
 - Signs of infection-fever, WBC, malaise



Assessment

- Acute- 8 hours; chronic-24 hours
- Measuring Wound
- Weekly
- Length, width, and depth
- Use a ruler or disposable paper wound ruler
- Measure width and length at widest point
- Depth: use sterile cotton-tipped swab
- Also check for sinus tract



Assessment



<https://www.youtube.com/watch?v=fDsPwhBN0Z8>

Planning

- Must have an order - change drsg or irrigate
- If ordered not to change-draw a circle with a pen around the drainage on the dressing
- Determine when last drsg change or irrigation
- Date/time/initial after drsg change
- If large amount of drainage, reinforce the dressing and notify the MD



Implementation

- Sterile-touching open or fresh surgical wound
- Nonsterile-wound is closed
- Clean
 - Water,
 - Normal saline
 - Antimicrobial cleaner
- If solution is refrigerated-bring to room temperature
 - Cold solution lowers wound temperature
 - Slows healing



Implementation

- Evaluate patient (is pain med needed?)
- Gather supplies
- Wash hands, clean gloves
- Assess drainage on dressing
- Remove old dressing
 - Loosen tape-Pull off tape toward the wound
 - Wet the drg with NS if it sticks to wound
- Inspect wound
- Remove dirty gloves, wash hands



Dressing Change

- Set up sterile field
- Clean wound-
 - Saline or wound cleanser (not cold)
 - Clean grossly infected wounds each change
 - Do not use cotton balls-cotton fibers can embed
 - Clean from center outward to avoid pulling microorganisms from skin to wound-do not use circular motion



Irrigating a Wound

- Flushing out an area with liquid
- Physician order
- Sterile technique
- Large syringe with 20 gauge needle
- Spray wound with irrigation solution
- Hold 1 inch from wound
- Use back and forth motion
- Hold a basin underneath inferior portion to collect drainage



Packing Wound

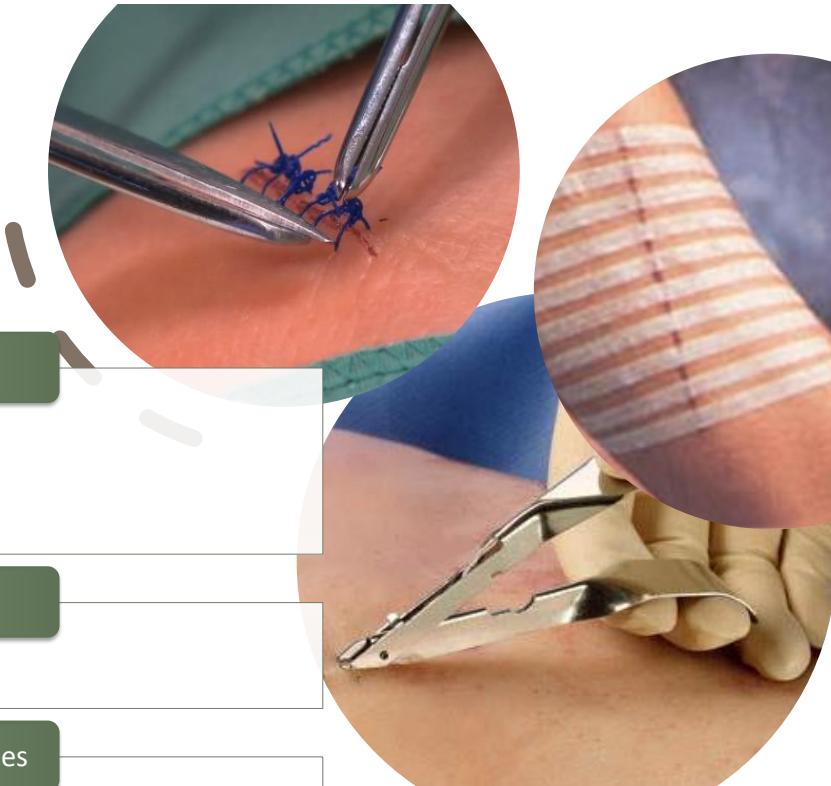
- Do not use on infected wounds
- Facilitates wound healing from the inside out, granulation tissue
- Wet to damp dressing
- Moist gauze is placed in the wound and changed before it dries out
- Performed every 4-6 hours
- Painful



Suture & Staple Removal

Sutures:

- Sterile technique
- Cut and pulled through the skin
- Inspect for intactness



Staples:

- Removal requires a special instrument

Steri-Strips applied after removal of sutures or staples

Describe best technique when cleansing a wound.

Describe best technique when cleansing a wound.

Wound Documentation

- VERY IMPORTANT
 - Amount and color of drainage on old dressing
 - Length, width, diameter/depth
 - Color of wound
 - Appearance of surrounding skin
 - Type of dressing applied
 - IS THE WOUND GETTING SMALLER??

Wound Details		Patient Information		Assessment Summary																							
Patient: John Smith		MRN: A123	Date of Birth: 1/1/1949																								
		Braden Score: 6 (Very High Risk) ▲		Braden Assessed On: 10/24/2007																							
WOUND ASSESSMENT DETAILS REPORT																											
Wound: Left Heel Assessment Date: 09/01/2007 4:01 PM Printout Date: 09/05/2007 10:01 PM																											
Wound Information <table border="1"> <tr> <td>Type</td> <td>Pressure</td> </tr> <tr> <td>Source</td> <td>Community-acquired</td> </tr> <tr> <td>Date Noted</td> <td>09/01/2007 3:53 PM</td> </tr> <tr> <td>Identified By</td> <td>Maggie Smith, RN</td> </tr> </table>						Type	Pressure	Source	Community-acquired	Date Noted	09/01/2007 3:53 PM	Identified By	Maggie Smith, RN														
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SEE OTHER SIDE FOR ADDITIONAL COMMENTS																											
Signature of Nurse _____ <small>©2007 iMinds, Inc. Wound Rounds is a trademark of Telemedicine Solutions, LLC. All rights reserved.</small>																											

Eye, Ear, & Vaginal Irrigations

Eye, Ear, & Vaginal Irrigations

Eye irrigations

May be performed when injury is involved and debris or a caustic substance is present in the eye

Ear irrigations

Used to remove cerumen or foreign substances

Vaginal irrigation

May be ordered for infections or surgical preparation



You are removing a dressing, and it begins to stick to the wound. What should you do?

You are removing a dressing, and it begins to stick to the wound. What should you do?

A

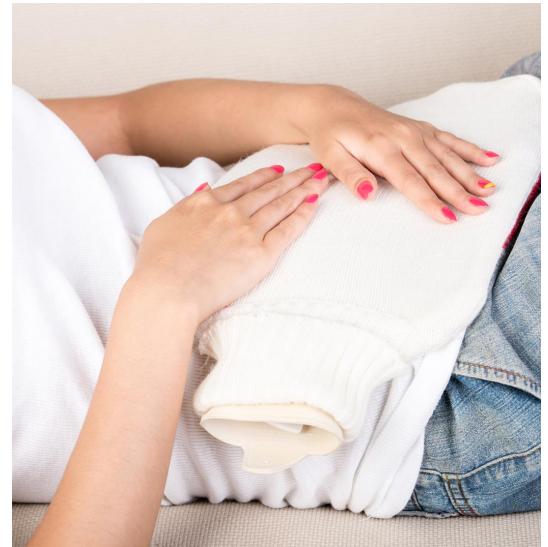
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Hot & Cold Applications

Can be dry or moist

Usually requires physician's order

Provides comfort and speeds healing process

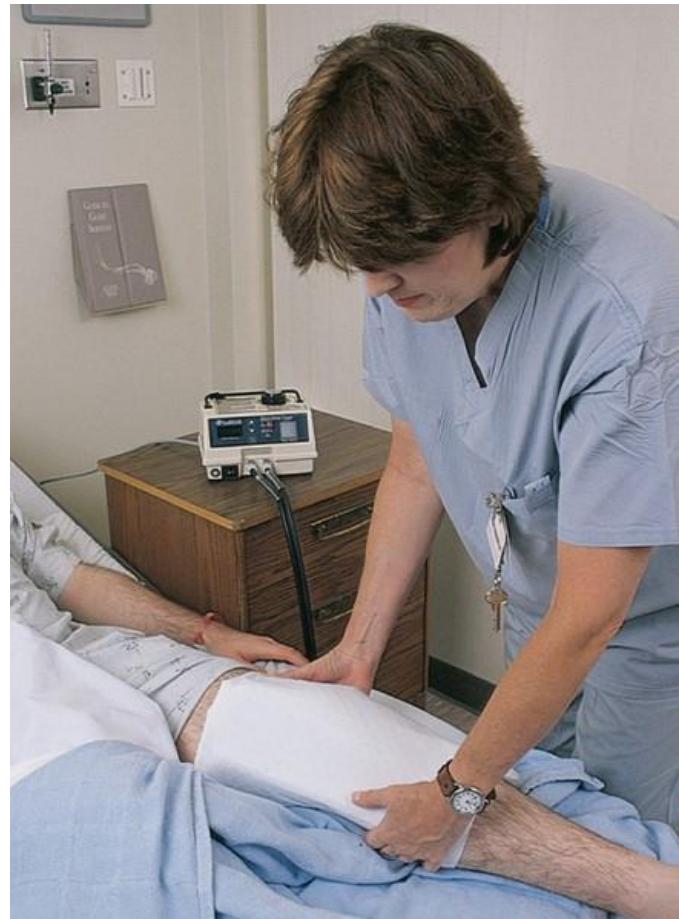


Hot Applications

Relieve pain,
reduce congestion,
relieve muscle
spasm

Reduce
inflammation and
swelling

Provide comfort,
elevate body
temperature



Cold Applications

Decreases swelling
and pain

For joint injuries or
areas requiring
decreased blood flow

Decreases cellular
activity, leading to
numbing

Used in the form of
compresses, ice bags,
collars, or
hypothermia blanket



Common Nursing Diagnosis for Patients with Wounds

Impaired skin integrity related to mechanical factor (e.g., surgical incision)

Risk for infection: Related factors: Inadequate primary defenses (broken skin)

Disturbed body image related to injury

Why couldn't the nurse use alcohol swabs on the patients?



Why couldn't the
nurse use alcohol
swabs on the
patients?

