R.B. Turnbull, Jr. MD School of WOC Nursing Education

Mini Case Scenarios: Wounds

Cleveland Clinic

Student Name ___Stacy Ann Bruce_____ Date: __02/11/2025_____

Reviewed by: _____ Date: _____

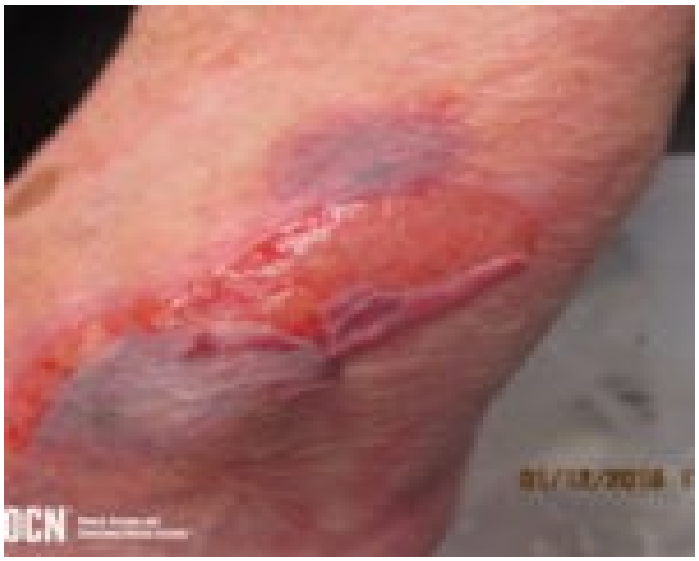
Score: /96

For the following wound case scenarios:

1. Identify the type of wound pictured.
2. Apply wound characteristics provided to identify recommendations/nursing orders for this patient & the wound.
3. Include the following in the recommendations/orders
    a. Dressing
        i. Type of dressing
        ii. Brand name(s)
        iii. Secondary dressing if needed
        iv. Dressing change schedule
    b. Other nursing orders pertinent to successful wound healing or prevention
    c. Rationale for choices
4. Provide an alternative to your initial dressing choice. This should be a product substitution, not simply a brand name substitution.
5. Answer any additional questions.

A case study has been completed for you below as an example.

Scenario Example



85-year-old in an extended care facility has a skin tear on her right forearm after a recent fall. The skin tear has been classified as Type ??? as described by the International Skin Tear Advisory Panel (ISTAP).

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Skin tear, Type 2
(1 point)

Wound Nurse recommendations/orders:

1. Use no rinse, pH balanced bath wipes at bathtime vs. soap, minimize rubbing at bath time, & gently dry fragile skin
2. Apply mesh contact layer (Hollister Adaptic)
3. Moisturize both arms daily with Medline Remedy moisturizing lotion
4. Wrap with roll gauze (Kerlix).
5. Change dressing on every shower day or if wet or soiled
6. Use long sleeve garments or sleeve covers for patient during waking hours

(3 points)

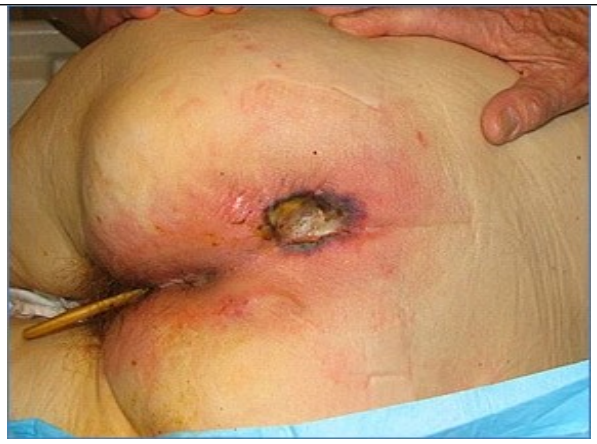
Rationale for choices

1. Bath wipes are pH balanced & soap is usually alkaline & difficult to rinse if person not showering
2. Rubbing creates friction which may cause skin tears
3. Contact layer prevents dressings from sticking to wound
4. Skin moisturizing is a preventive measure for skin tears
5. Roll gauze keeps contact layer in place & patient from touching wound & is non-adhesive
6. Long sleeves protects patient's skin and discourages picking at dressing

(3 points)

1 alternative primary/secondary dressing: Non-adhesive foam dressing, 5 layers, (Allevyn) secured with elastic mesh dressing (Medline elastic retention dressing).
(1 point)

Scenario 1



You are asked to assess a new resident admitted with a sacral wound. Patient is 82-year-old and admitted with dementia. Wound on sacrum with 100% yellow slough and brown necrotic tissue at wound edges. Wound measures approximately 4 cm x 3 cm x 2 cm. Periwound with blanchable erythema.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Unstageable

(1 point)

Wound Nurse recommendations/orders:

- Gentle cleansing with saline solution to remove debris and prevent infection.
- Gentle pat dry
- Apply Santyl
- Cover with foam dressing
- Change dressing daily or as needed if soil.
- repositioning the patient every 2 hours, using a pressure-relieving mattress
- Regularly assess the wound for signs of infection (redness, warmth, drainage, foul odor)
- Nutrition consult placed.
- Continue pain medication as needed.

(3 points)

Rationale for choices:

-Santyl is effective at enzymatically breaking down necrotic tissue which is key for cleaning out the wound and allowing healthy tissue to form.

-Santyl is a selective debrider, it targets necrotic tissue without harming viable tissue.

- Foam dressings provide a moist wound environment, which supports faster tissue regeneration and helps prevent further damage to the tissue

- Regular dressing changes help to remove any accumulated exudate, bacteria, and dead tissue that could impede healing

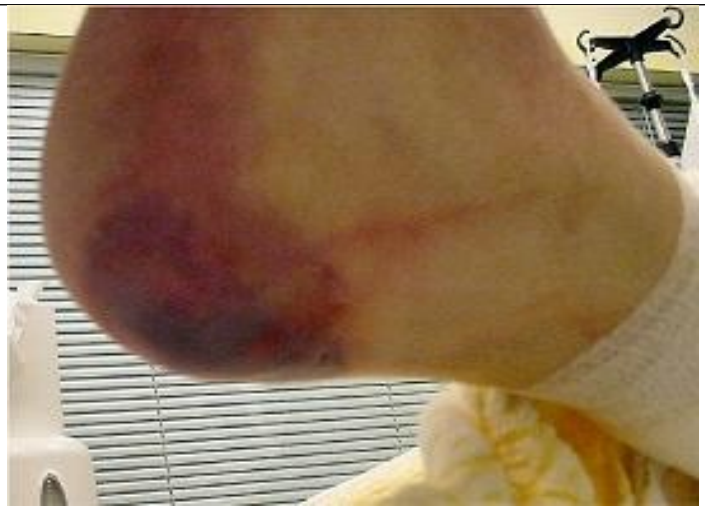
- Repositioning the patient every 2 hours is essential for preventing further pressure and promoting circulation to the affected area

- Adequate nutrition is critical for wound healing, especially in patients with Stage 3 pressure injuries.

- Pressure injuries, particularly Stage 3, can be very painful. Continuing pain management ensures that the patient is comfortable and able to tolerate repositioning, dressing changes **(3 points)**
1 alternative primary/secondary dressing Medihoney paste **(1 point)**

6.5/8 points

Scenario 2



The wound care nurse is consulted to see a 54-year-old, post op day 4 after an abdominal surgery. Left heel has non-blanchable purple discoloration.

Image courtesy of Judy Mosier, MSN, RN, CWOCN.

Wound type: Deep tissue Injury (DTI)

(1 point)

Wound Nurse recommendations/orders:

-Offload pressure with Multi Podus Boots

-Regularly assess the wound for any changes, such as increased size, pain, or the development of a full-thickness ulcer

-Use no rinse, pH balanced bath wipes to clean the area or Wash with soap and water

- gently pat dry

-Contact layer Cover with foam dressing / Mepilex Border Heel/Optifoam gentle heel

-**R**epositioning (every 2 hours)

(3 points)

Rationale for choices:

- Multi Podus boots are designed to offload pressure from vulnerable areas like the heels. They reducing friction and shear forces that could further compromise the tissue

- Regular assessment allows for early identification of any progression or deterioration of the DTI.

- pH-balanced bath wipes are gentle on the skin, helping to preserve the skin's natural acid mantle and prevent further irritation

- Gently patting the area dry rather than rubbing is essential to avoid further damage to already delicate skin

- Foam dressings and Mepilex Border Heel offer a non-stick surface, reducing pain during dressing changes and minimizing trauma to the sensitive tissue

(3 points)

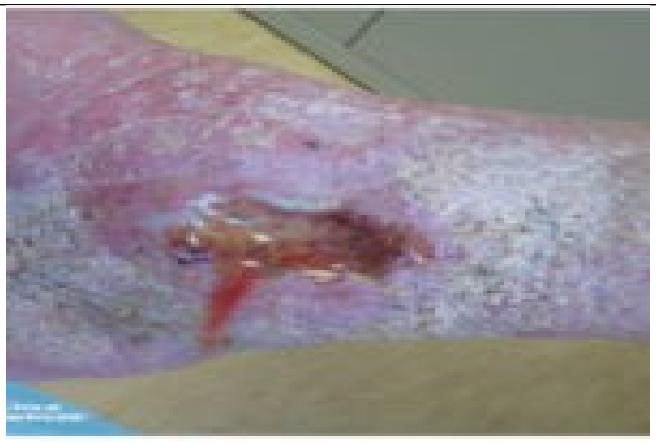
1 alternative primary/secondary dressing

Remedy Skin Repair Cream / Remedy Nutrashield

(1 point)

6.5/8 points

Scenario 3



A 70-year-old arrives at the outpatient wound clinic with a nonhealing wound located on gaiter area of right lower extremity. The wound measures approximately 5 cm x 2.5 cm x 0.5 cm. The wound is a shallow, irregular shaped ulcer with moderate amount of exudate. Periwound is macerated. Hemosiderin staining is noted to BLE. Patient has ABI of 0.85 to RLE and 0.90 to LLE

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Venous Leg Ulcer (VLU)

(1 point)

Wound Nurse recommendations/orders:

-Clean the wound with a normal saline
-pat dry
-Apply a Dimora Super Absorbent dressing nonstick gauze pad with ultrasorb polymer.
-Change dressing daily
-Elevate leg
-Apply graduated compression stockings or wraps
-Give pain medication as prescribe
-Consult surgery or plastic for possible debridement

(3 points)

Rationale for choices:

- Ultrasorb polymer in the dressing helps to rapidly absorb and lock away exudate
-Leg Elevation helps reduce edema and relieves venous pressure, improving circulation and promoting wound healing.
- Wound cleaning daily to flush out bacteria and remove dead tissue
- Wear compression stockings to prevent blood from pooling in the legs and to speed healing

(3 points)

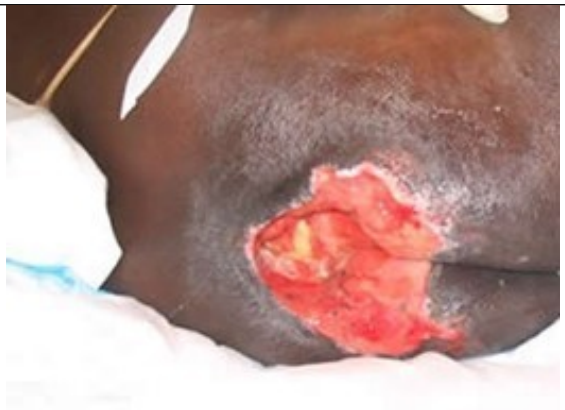
1 alternative primary/secondary dressing:

Alginate Dressing-Alginate dressings absorb exudate and conform well to the wound bed, promoting healing while preventing maceration.

(1 point)

4/8 points

Scenario 4



An 85-year-old is admitted to the hospital with a stage ??? pressure injury on sacrum and is bedridden.
Full thickness wound measures approximately 8 cm x 10 cm x 0.4 cm. Wound bed pink with small amount of yellow slough. No structures, no bone noted. Wound has moderate serosanguineous drainage.

Image courtesy of Judy Mosier, MSN, RN, CWOCN.

Wound type:
Stage 3 Pressure Injury
(1 point)

Wound Nurse recommendations/orders:
- Irrigate wound with NS or Wound cleanser
-Gentle pat dry
-Apply Concatec Aquacel Hydrofiber wound dressing cover with abd pad tape border with paper tape
--Implement frequent repositioning (every 2 hours) to offload pressure from the sacrum and other bony prominences.
-Change dressing daily or PRN if soil
(3 points)

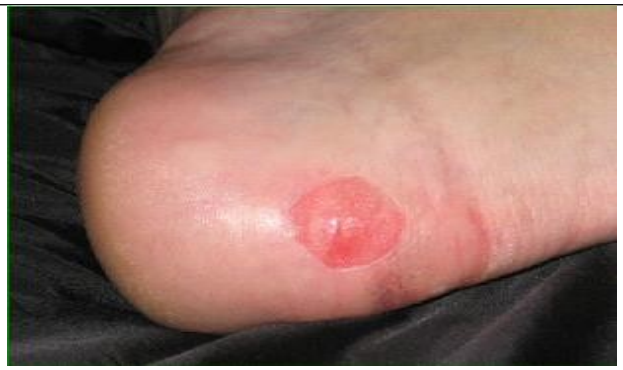
Rationale for choices:
-Saline is gentle and non-irritating, helping to maintain a clean wound environment
-After irrigating the wound, it's important to gently pat the area dry, as rubbing or harsh drying can cause additional trauma to the delicate tissue surrounding the wound
- Aquacel Hydrofiber is designed to absorb moderate to large amounts of exudate, which helps to maintain a moist wound environment and prevent maceration of the surrounding skin.
-abdominal pad is a highly absorbent dressing that helps keep the wound clean and dry by absorbing exudate.
-paper tape is particularly important for sensitive skin since it is less likely to cause damage upon removal than stronger adhesives.
- Repositioning and the use of proper support surfaces prevent further tissue damage and assist in wound healing by reducing mechanical stress on the affected area.
(3 points)

What support surface would you recommend and why?
Low-Air-Loss or Alternating Pressure Mattress- These surfaces are designed to help

redistribute pressure across the body, thus minimizing the risk of additional pressure injury. They can help reduce shear, friction, and pressure on the sacrum, providing the necessary support to the bedridden patient. This type of surface also helps maintain skin integrity by managing moisture levels, reducing the risk of further skin breakdown. *Ok*
(1 point)

4.5/8 points

Scenario 5



56-year-old hospitalized for cardiac surgery. During the hospital stay, developed a blister related to pressure on right heel. The blister has now ruptured.

Image courtesy of Judy Mosier, MSN, RN, CWOCN.

Wound type: Stage 2 Pressure Injury

(1 point)

Wound Nurse recommendations/orders:

- Clean area with no rinse foam cleaner or soap and water
- Allow to air dry
- Apply Skin Repair cream (Dry) or Nutrashield open to air
- Offload pressure with Multi Podus Boots

(3 points)

All three of these steps might be excessive here. Skin prep will block the mechanism of moisturizing cream. Typically we don't want to use cream under a foam dressing.

Rationale for choices:

- Using a no-rinse foam cleaner or soap and water helps cleanse the skin without causing irritation

-Nutra shield cream is a Protectant provides an effective, long-lasting moisture barrier

- Multi Podus Boots are specifically designed to offload pressure from vulnerable areas, such as the heels

(3 points)

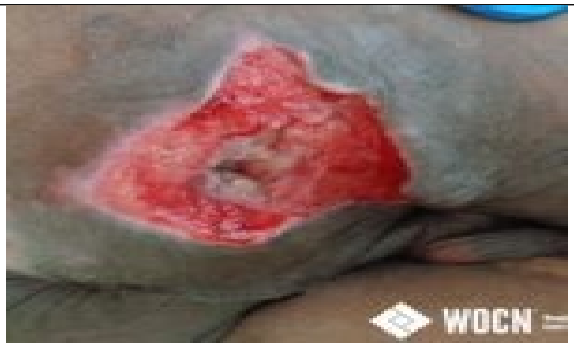
1 alternative primary/secondary dressing

-Barrier ointment twice daily Triad cream or Hydrogel with or without foam dressing *+offloading.*

(1 point)

6/8 points

Scenario 6



82-year-old arrives to the acute care setting with a pressure injury on the right ischium. Patient has been cared for at home by spouse and spends many hours per day in a wheelchair.
The wound measures approximately 6 cm x 8cm x 2 cm. Wound bed 80% pink tissue with bone visible. Small amount of tan drainage noted with assessment. Periwound intact.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Stage 4 Pressure Injury

(1 point)

Wound Nurse recommendations/orders:
-Clean with Dakin 0.125% solution
-Pat dry gently
- Apply hydrocolloid with silver
-Cover with foam dressing *check daily change Q2 days or PRN*

Consider drainage with this wound. Hydrofiber is absorbtive, there is exposed bone here. If using an alginate or hydrofiber, another component is needed to this dressing.
(3 points)

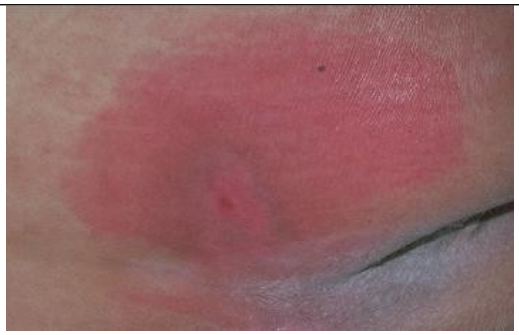
Rationale for choices:
- Dakin's solution (a diluted form of sodium hypochlorite) is commonly used as an antiseptic for cleaning wounds, especially those at high risk for infection. The 0.125% solution is a mild concentration that helps to debride the wound (remove necrotic tissue) while also reducing bacterial load without being too harsh on healthy tissue.
- After cleansing the wound with Dakin's solution, it's important to pat the area dry gently rather than rubbing it, which could cause additional irritation or trauma to the fragile tissue around the wound.
- Calcium alginate dressings are also capable of absorbing excess fluid while helping with wound closure by providing a gel-like consistency that adheres to the wound bed, promoting faster healing.
- Foam dressings provide cushioning and protection to the wound site, reducing the risk of trauma from external friction or pressure. They are also relatively easy to apply and remove, which helps minimize discomfort for the patient during dressing changes.
(3 points)

1 alternative primary/secondary dressing:

-Anti-microbial chlorhexidine packing strips with foam dressing *– this is a large wound, consider drainage amount and type, EBP and gauze dressings limited evidence in this case.* **(1 point)**

5/8 points

Scenario 7



The wound care nurse is consulted to see a 66-year-old who developed non-blanchable erythema on right sacrum after being on bedrest for the past 24 hours.

Image courtesy of Judy Mosier, MSN, RN, CWOCN.

Wound type: Stage 1 Pressure Injury

(1 point)

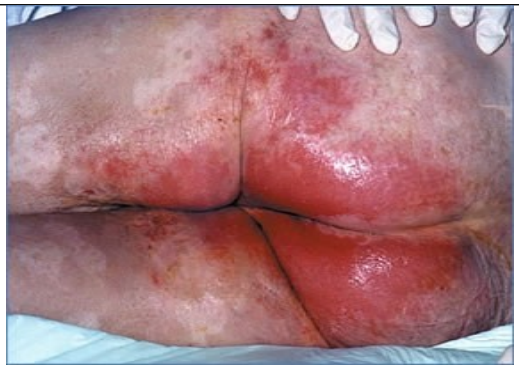
Wound Nurse recommendations/orders:
-Use no rinse, pH balanced bath wipes or foam cleaner to clean skin
-Repositioning and Offloading Pressure
-Apply a moisture barrier cream daily (Sting Free Barrier Cream)/ Remedy Skin Repair Cream
-Open to air
-Change dressing daily or PRN
-Implement the use of a pressure-relieving cushion
(3 points)

Rationale for choices:
- Regularly changing the patient's position (every 2 hours or as needed) helps redistribute pressure away from high-risk areas
- Moisture barrier creams, like Sting-Free Barrier Cream, are designed to protect the skin from irritation caused by moisture, friction
- Pressure-relieving cushions are designed to offload pressure from high-risk areas (such as the buttocks and hips)
(3 points)

1 alternative primary/secondary dressing
-Silicone foam dressing change Q7 days *- this could be in place up to 7 days, and checked daily.*
(1 point)

8/8 points

Scenario 8



Wound care nurse consulted to see a 56-year-old with a "sore bottom". Patient has been at your facility for 2 weeks with diagnosis of C-Diff. Today you have been consulted for a treatment plan for damaged skin.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Incontinent Associated Dermatitis

(1 point)

Wound Nurse recommendations/orders:

-Clean area with a pH-balanced cleanser

-Gently pat dry

-Apply critic-Aid clear antifungal twice daily or PRN after incontinence episode

(3 points)

Rationale for choices:

- pH-balanced cleanser is specifically formulated to maintain the skin's natural acidic barrier, which helps protect it from harmful bacteria and irritants
- After cleaning the area, gently patting the skin dry (rather than rubbing) is essential for avoiding friction or additional trauma to delicate skin
- Critic-Aid Clear Antifungal acts as a barrier against moisture, which is particularly important in patients with incontinence. It helps to protect the skin from the damaging effects of prolonged exposure to urine or fecal matter, reducing the risk of skin irritation, breakdown, and maceration. The antifungal properties of Critic-Aid help prevent and treat fungal infections,
- Twice per day application ensures continuous protection and helps prevent the buildup of moisture in areas like the perineum or buttocks.
- Applying the paste PRN (as needed) after each incontinence episode is crucial because moisture exposure from urine or stool can lead to irritation or breakdown if not addressed immediately.

(3 points)

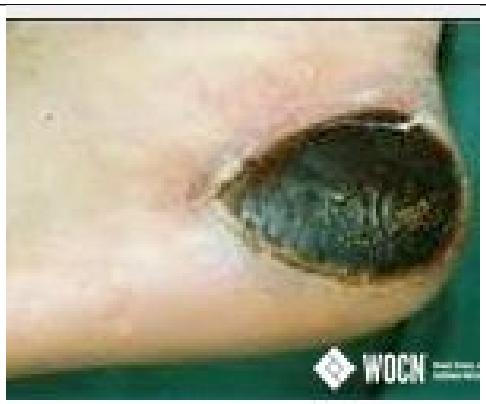
1 alternative primary/secondary dressing:

Miconazole 2 % cream with barrier ointment twice daily

(1 point)

5/8 points

Scenario 9



An 85-year-old presents to acute care with dry black eschar on left posterior heel. Cared for at home by elderly spouse, he has been bedridden for the past 6 months. The wound measures approximately 6 cm x 10cm x 0 cm. Wound edges are dry and periwound has no erythema.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Unstageable Pressure Injury

(1 point)

Wound Nurse recommendations/orders:

-Clean with PH balance wound cleanser , NS or soap and water
-Gently pat dry
-Apply Povidone-iodine (Betadine)10% solution leave open to air.
-Consult Surgery or Plastics
-regular repositioning (every 2 hours) to reduce pressure on the heel and prevent further damage.

(3 points)

Rationale for choices:

- pH-balanced wound cleanser helps maintain the skin's natural acidic environment, which is essential for protecting against harmful bacteria and promoting healthy tissue regeneration.
- Gently patting the wound area dry is important to avoid friction or abrasion that can cause further injury to already delicate skin
- Povidone-iodine used in a daily regimen of ulcer care can reduce the level of infection and promote healing
- Consult with surgery or plastic surgery is important for wounds that may require more advanced treatment or surgical intervention, such as debridement, grafts, or flap procedures.
- Repositioning the patient every 2 hours helps relieve pressure on vulnerable areas

(3 points)

1 alternative primary/secondary dressing:

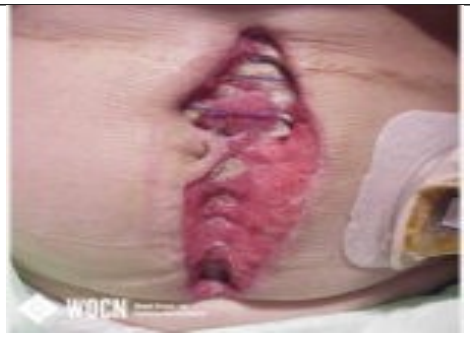
Cover with foam dressing and suspend heels off mattress with a pillow under calves or offloading boot

(1 points)

6/8 points

Scenario 10

/8 points



The wound care nurse is consulted to see a 74-year-old patient transferred from a community hospital with an abdominal wound several days post-surgery for ischemic bowel. Wound measures approximately 10 cm x 4 cm x 3 cm with visible sutures. Wound bed dry, pink with small areas of yellow tissue (less than 10% of wound base). Periwound skin intact. WOC team consult for NPWT orders.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type:

Surgical Wound (Post-Operative)

(1 point)

Wound Nurse recommendations/orders:

- Assess the wound for size, depth, tissue type

-Give pain medication as order before treatment

-Apply NPWT for Surgical wound (post operative), Clean the wound gently with NS, Cut foam dressing to fit wound size, Apply a sterile foam dressing compatible with NPWT, seal with transparent adhesive or occlusive dressing, Set NPWT pump to 125 mmHg, ensure proper suction and check for any air leaks or malfunctions.

-Document the wound assessment, NPWT settings, dressing changes, and any patient responses in the medical record

-Assess the wound for signs of infection

- Reassess wound and NPWT therapy after 48 hours

-Change NPWT dressing q7 days

(3 points)

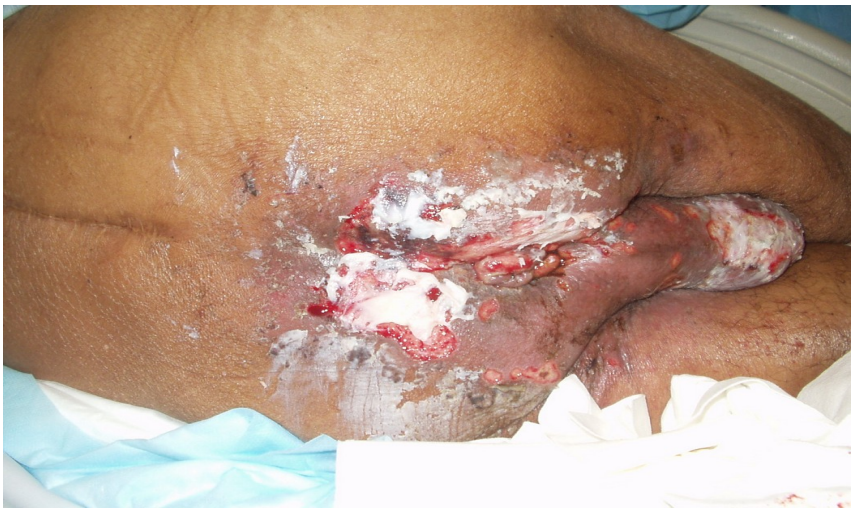
Rationale for choices:

- Gentle cleansing of the wound is essential to avoid further trauma to delicate or healing tissue
- Vacuum-assisted closure (VAC), is a therapeutic technique that involves applying controlled negative pressure to a wound using a specialized dressing and vacuum device
- Foam dressing used in NPWT is designed to work in conjunction with the vacuum system to create the negative pressure needed for effective therapy
- Infection can delay healing, complicate treatment, and even lead to systemic complications.

Signs of infection may include increased redness, warmth, swelling, the presence of pus or foul-smelling drainage, and increased pain at the wound site. **(3 points)**
1 alternative primary/secondary dressing: Calcium Alginate to pack dead space covered with transparent adhesive If NPWT is not an option change q 2 days **(1 point)**

4/8 points

Scenario 11



Wound care nurse consulted to see a 45-year-old with a "sore bottom". Patient has been at your facility for 2 weeks with diagnosis of C-Diff. Today you have been consulted for a treatment plan for damaged skin.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type: Incontinence-Associated Dermatitis (IAD)

(1 point)

Wound Nurse recommendations/orders:

Follow C Diff contact precautions ←*good*
Clean the affected area with a non-cytotoxic, pH-balanced cleanser
Gently pat dry
Apply stoma adhesive powder
Apply desitin cream
Change dressing daily and PRN after incontinence episode
Apply fecal tube , monitor for sign of break down around the peri rectal area If stool leaks, remove the pouch, clean the skin, and apply a new pouch

(3 points)

Rationale for choices:

- non-cytotoxic, pH-balanced cleanser is essential for maintaining the integrity of the skin while cleaning
- After cleaning the affected area, gently patting dry the skin is important to avoid friction or further irritation
- While stoma adhesive powder is typically used to protect skin around stoma sites, but it can also be effective in preventing skin irritation and moisture-related breakdown in other areas
- Desitin cream helps to prevent skin breakdown by creating a protective barrier that shields the skin from urine or stool, reducing the risk of irritation and incontinence-associated dermatitis (IAD). It has anti-inflammatory properties, helping to soothe and heal irritated skin.

(3 points)

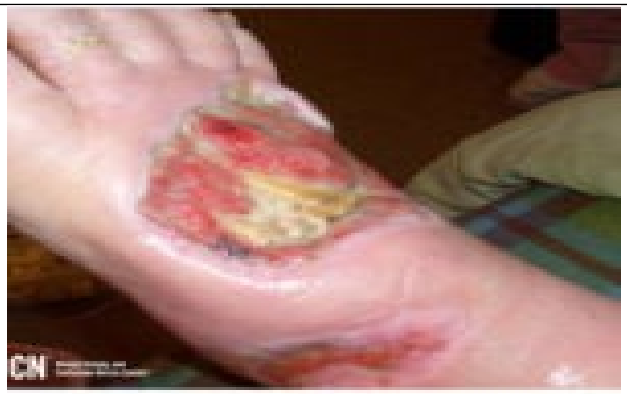
1 alternative primary/secondary dressing:

Coloplast Critic-Aid Thick Moisture Barrier Paste
Zion oxide based paste (40%) twice per day and PRN

(1 point)

7/8 points

Scenario 12



A 75-year-old is admitted to acute care setting from home with pneumonia. They have a history of Raynaud Disease and Diabetes Mellitus. Has been seen at an outpatient wound clinic but is uncertain what the treatment plan is and you have no access to those medical records.

Open wound on dorsum of foot with exposed tendon. Measures approximately 8 cm x 12 cm x 0.2 cm. Wound bed 60% pink tissue and 40% yellow/black, brown tissue. Scant amount of tan drainage. Periwound intact with epibole.

Image courtesy of Wound, Ostomy and Continence Nurses Society image library.

Wound type:

Chronic Partial-Thickness or Full-Thickness Wound with Necrotic Tissue / Foot Ulcer – *neuropathic component likely*

(1 point)

Wound Nurse recommendations/orders:

Clean area with NS
Pat Dry
Apply hydrogel
Cover with abd pad
Wrap with roll gauze (Kerlix) tape borders with paper tape
Consult surgery or plastic for Debridement of necrotic tissue
Consult specialist for chronic diseases like diabetes

(3 points)

Rationale for choices:

- Normal saline is a gentle, non-cytotoxic solution that is ideal for cleaning wounds. It does not harm healthy tissue and helps to remove debris and bacteria without irritating the wound bed.
- Gently patting the wound dry after cleaning is important to prevent mechanical injury to fragile skin and delicate tissues
- Hydrogel is an excellent choice for wounds with dry or necrotic tissue, as it helps maintain a moist wound environment, promotes autolytic debridement, and hydrates dry tissues.
- bd pads (abdominal pads) are absorbent dressings that provide a protective barrier over the wound, absorbing drainage and protecting the wound from contaminants.
- Kerlix roll gauze is often used to wrap around wounds to secure dressings in place. It is flexible and breathable, which makes it ideal for maintaining integrity and comfort during movement
- Chronic diseases, like diabetes, can significantly affect wound healing. Diabetes mellitus impairs circulation, immune function, and can lead to neuropathy, all of which complicate

wound healing, especially in the lower extremities. **(3 points)**
1 alternative primary/secondary dressing: Alginate Dressing , cover with drain sponge rapped with kerlix and secure with tape **(1 point)**

7/8 points

Community Care, Inc. (n.d.). *Pressure injury guideline*. Retrieved from https://www.communitycareinc.org/docs/default-source/provider-clinical-guidelines/community-care-pressure-injury-guideline.pdf?sfvrsn=2 ← *this is a handy resource, make sure the most recent evidence is used to guide practice/consider using primary or secondary sources to back actions or build resources like this of your own for your org.*