

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

## Mini Case Scenarios: Wounds



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Score: <80% -1 resub

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, minimize rubbing at bath time, & gently dry the 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 pressure injury. ✓

**(1 point)**

**Wound Nurse recommendations/orders:**

- 1- Gently clean wound with non-cytotoxic PH balance solution (Vashe) and pat dry
- 2- Apply Calcium alginate dressing ( MEDIHONEY).
- 3- Cover with Silicone Bordered foam ( Allevyn gentle border 5x5).
- 4- Change dressing daily.
- 5- Reposition every 2 hours and lay patient on the side
- 6- Use Roho cushion when sitting up in the chair
- 7- Low air loss mattress
- 8- Nutrition management
- 9- Administer pain medication per physician's order

**(3 points)**

**Rationale for choices:**

- 1- Cleaning wound with non-cytotoxic solution with PH balance similar to that of the skin prevents cell damage.
- 2- The presence of slough hinders the absorption of medication to the tissue. Thus, preventing wound healing.
- 3- Redness in the peri-wound may indicates infection. Thus culture is required to rule out what bacterial.
- 4- Medi honey is an antimicrobial property, provides moisture and debridement
- 5- Sacral foam gives a protective cushion to the sacral area. Thus, preventing more pressure to the wound
- 6- Repositioning every two hours will take off the weight from the sacrum .Thus helping to reduce the pressure.
- 7- Roho cushion provides air the sacrum and redistributes weight.
- 8- Low-air-loss mattress is used for pressure redistribution.
- 9- Patient needs adequate nutrition for proper wound healing
- 10- Sacral wound could be painful sometimes. Managing pain will give patient a better quality of life.

**(3 points)**

**1 alternative primary/secondary dressing**

1. Use Collagenase (Santyl) ointment as ordered by the physician.
2. Cover with a saline moist gauze and abdominal pad.
3. Secure with a paper tape
4. Change dressing daily.

**(1 point)**

6/8 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:**

- 1- Clean with Vashe
- 2- Apply no sting barrier film skin protectant (Cavilon).
- 3- Apply non bordered Allevyn heel foam dressing.
- 4- Wrap it with kerlix and secure with a Medipore tape.
- 5- Change dressing every other day.
- 6- Use wedge or pillow to off load the heel
- 7- Reposition patient every two hours

ok

**(3 points)**

**Rationale for choices:**

- 1- Vashe is a noncytotoxic wound cleanser and it also has antimicrobial property
- 2- No sting skin barrier helps protect the skin from breaking down.
- 3- Wearing heel cup gives the heel a protective layer to prevent it from pressure.
- 4- Kerlix helps in securing the dressing in place
- 5- Offloading takes pressure off the heel. Thus, promoting wound healing
- 6- Repositioning also help to take pressure off the pressure point

**(3 points)**

**1 alternative primary/secondary dressing**

- 1- Paint heel with betadine and let it dry
- 2- Wrap it with kerlix and secure with a tape.
- 3- Wear multi podus boot at all time

(1 point)

7/8 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 ulcer ✓

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Clean wound with non-cytotoxic wound cleanser (Vashe)
2. Measure wound and take photo per patient's permission.
3. Apply barrier film skin protectant (Cavilon) to the peri-wound.
4. Apply Silver Alginate dressing, covered with hydroconductive wound dressing (Drawtex).
5. Abdominal pad, secure with gauze roll (Kerlix) and Medi pore tape.
6. Change dressing once a day.
7. Elevate legs if they get swollen
8. Home health referral, to see patient two times a week, evaluate and treat.
9. Follow-up for dressing change in the clinic once a week.

**(3 points)**

**Rationale for choices:**

1. Cleaning the wound with a non-cytotoxic solution helps reduce bioburden however, protecting the cells that promote wound healing.
2. Measuring and taking photo of the wound keeps track of the treatment progress of the wound.
3. Prevents damage to the periwound.
4. Silver alginate controls bioburden and exudate in the wound.
5. Absorptive dressing helps in absorbing the drainage from the wound, and to keep it away from damaging the surrounding skin.
6. Changing dressing daily prevents accumulation of exudate, bacterial growth and damage of the peri-wound.
7. Swollen legs are elevated to decrease edema and pain.

**(3 points)**

**1 alternative primary/secondary dressing:**

- Antibacterial wound dressing (UrgoClean Ag)
- Non bordered foam dressing.
- Wrap with gauze roll (Kerlix) and secure with tape.

**(1 point)**

5/8 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:**

1. Clean wound with non-cytotoxic solution (Vashe) and pad dry
2. Measure wound and take photo of per patient's permission
3. Apply barrier film skin protectant (Cavilon) to the peri-wound
4. Cut pieces of 3M V.A.C. Drape and pre-drape peri wound skin
5. Cut black 3M V.A.C. Granufoam dressing to fit the size of the wound
6. Cover the granufoam with 3M V.A.C. Drape.
7. Cut a hole and apply 3M Sensa T.R.A.C pad tubing.
8. Turn the suction on to 125 mm Hg.
9. Refer to a dietitian to evaluation and treat
10. Turn and reposition every two hours when in bed
11. Use Roho cushion when up in the chair
12. Place patient on a low air loss mattress
13. Change dressing three times a week.

**(3 points)**

**Rationale for choices:**

1. Measuring and taking photo of the wound keeps tract of the treatment progress of the wound.
2. Draping the skin around the periwound before applying a NPWT dressing allows foam to overlap the peri wound without damaging the tissue.
3. Cleaning the wound with a non-cytotoxic solution helps reduce bacterial bioburden however, protecting the cells that promote wound healing.
4. Peri skin is pre-drape to prevent skin damage from moisture
5. Cut to fit the size of the wound because we want only the tissues in the wound to be suctioned
6. A hole is cut to the size of the T.R.A.C. pad to enforce a better seal and a good suctioning.
7. Turning, repositioning every two hours, use of Roho chair and low air loss mattress helps redistribute pressure.
8. Negative Pressure Wound Therapy draw wound edges together, removes exudates, promotes granulation tissue formation.

**(3 points)**

**What support surface would you recommend and why?**

-- Low air loss mattress and Roho cushion.

**(1 point)**

4/8 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:**

Pressure injury stage 2 ✓

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Clean the wound bed with non-cytotoxic cleanser
2. Apply a Curad non-adherent contact layer (Oil emulsion dressing).
3. Cover with Silicone bordered foam (Allevyn gentle border).
4. Change dressing every other day.
5. Avoid shoes that will add more pressure to the open wound.
6. Offload heels with Sage Prevalent Heel Protector.
7. Reposition patient every two hours.

**(3 points)**

**Rationale for choices:**

1. Cleaning the wound with a non-cytotoxic solution helps reduce bacterial bioburden however, protecting the cells that promote wound healing.
2. Prevents dressing from adhering to the wound.
3. Allevyn is used for cushion and protection to the wound.
4. Heel protector for pressure relief.

**(3 points)**

**alternative primary/secondary dressing**

1. Apply petrolatum gauze dressing (Xeroform) directly to the wound.
2. Place 4x4 gauze on top.
3. Wrap it with conforming gauze and secure with Medi pore tape

**(1 point)**

3/8 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:**

Pressure injury stage 4, Full thickness skin and tissue loss with exposed bone.

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Apply Mckesson Silver Dressing (UrgoClean Ag).
2. Cover with Mckesson abdominal dressing (ABD pad).
3. Secure with 3M Medipore soft cloth surgical tape.
4. Change dressing daily.
5. Reposition patient every 2 hours
6. Roho cushion for the wheelchair
7. Low air loss mattress
8. Consult nutritionist.
9. Consult infectious disease.

**(3 points)**

**Rationale for choices:**

1. UrgoClean Ag is an anti-microbial treatment that helps prevents microbial organisms from growing. The dressing also help to absorb any drainage.
2. ABD absorb drainage, protects the wound and provide a cushion to prevent any further pressure.
3. Repositioning takes the pressure off the ischium.
4. Roho cushion and low loss air mattress redistribute pressure.
5. Balance diet and protein intake promotes wound healing.
6. Consult infectious disease to rule out osteomyelitis.

**(3 points)**

**alternative primary/secondary dressing:**

1. Apply ConvaTec Aquacel Alginate dressing (aquacel advantage).
2. Cover with ABD pad
3. Secure with tape.

**(1 point)**

3.5/8 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 (Non-blanchable erythema). Lightly pigmented and darkly pigmented.

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Clean and dry the discolored skin.
2. Avoid massaging the affected area.
3. Turn and reposition every two hours and as needed.
4. Nutritionist should evaluate and treat.
5. Use low air loss mattress
6. Roho cushion when sitting up in the chair

**(3 points)**

**Rationale for choices:**

1. Optic view dressing protects the area and gives it a cushion that keeps it from developing into further pressure injury. It is also transparent that one can see through to assess the skin and monitor skin.
2. Hydrocolloid dressing also protects the skin and gives it the cushion to prevent further tissue damage.
3. Roho cushion and low loss air mattress are used for pressure redistribution
4. Adequate intake of protein and calories promote tissue growth. Thus preventing pressure injury.

**(3 points)**

**1 alternative primary/secondary dressing**

5. Apply 3M barrier film skin protectant (Cavilon)
6. Leave it open to air
7. Use Roho cushion when up in the chair
8. Reposition every two hours

*good*

**(1 point)**

4.5/8 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:**

Candidiasis

**(1 point)**

**Wound Nurse recommendations/orders:**

- 1- Clean skin with a PH balance no-rinse cleanser and disposable soft cloth, then pad dry.
- 2- Apply Coloplast Baza Antifungal cream (moisture barrier antifungal cream) to the affected area.
- 3- Wear loose light-weight clothing and change when it becomes wet.
- 4- Use a wicking fibric (Intra dry) to wick the gluteal folds.
- 5- Change the dressing daily and as needed.
- 6- Avoid heat to the affected area, us fan to keep it cool.
- 7- Use bedside commode at night time.
- 8- Nutritionist should evaluate and treat

**(3 points)**

**Rationale for choices:**

- 1- A PH balance no-cleanser and the use of a soft cloth will help protect the skin from further damage.
- 2- Loose clothe prevents irritation to the affected area.
- 3- Cooling the affected area with a fan reduces pain.
- 4- Bedside commode to facilitate toileting, and schedule toileting if patient is able to sit up.
- 5- A balance nutritional intake improve wound healing.

**(3 points)**

**alternative primary/secondary dressing:**

1. Use Nystatin powder (Nystop),
2. Next, apply zinc oxide
3. Apply an external fecal pouch and attach to a drainage system to contain stool. Change every 1-2 days and as needed.

**(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, covered with dry eschar.

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Paint the left posterior heel eschar with 10% Providone-iodine, and let it dry.
2. Cover the painted heel with Allevyn Heel Foam dressing 4 1/8"X 5 5/16".
3. Wrap with Kerlix gauze roll bandage.
4. Secure it with a Medi Pore tape.
5. Change dressing daily and assess the heel.
6. Off-load heel using a multi-Podus boot
7. Reposition every two hours.

**(3 points)**

**Rationale for choices:**

1. Providone iodine helps prevent bacterial growth
2. Heel protector prevents the heel from further skin damage.
3. Medipore secures dressing in place.
4. Off-loading keeps pressure off the heel. Thus, preventing further damage.

**(3 points)**

**1 alternative primary/secondary dressing:**

1. Apply No sting barrier film (Cavilon) to protect the affect area.
2. Cover with gauze 4x4, wrap with kerlix and secure with a tape.

**(1 points)**

6.5/8 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:**

Clean, dehiscence surgical wound with full thickness skin loss

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Gather supplies and wash hands.
2. Clean wound with non-cytotoxic solution (Vashe) and pad dry
3. Measure wound and take photo of per patient's permission
4. Apply barrier film skin protectant (Cavilon) to the peri-wound
5. Cut pieces of 3M V.A.C. Drape and pre-drape peri wound skin.
6. Cut black 3M V.A.C. Granufoam dressing to fit the size of the wound
7. Cover the granufoam with 3M V.A.C. Drape.
8. Cut a hole and apply 3M Sensa T.R.A.C pad tubing.
9. Turn the suction on to 125 mm Hg.
10. Dietitian evaluation and treat
11. Turn and reposition every two hours when in bed and as needed.
12. Use Roho cushion when up in the chair
13. Place patient on a low air loss mattress.
14. Change dressing 3 times a week.

**(3 points)**

**Rationale for choices:**

1. Gathering supplies before starting the procedure saves time and prevent one from running back and forth.
2. Hand washing prevents the spread of infection.
3. Assess the wound/peri-wound to identify any changes and determine wound response to treatment.
4. Cavilon is a skin sealant and it also helps the drape to seal better.
5. Mepitel prevents the pressure from sucking out the visible sutures.
6. Draping the peri-wound prevents exudate from touching the skin and causing skin damage.
7. Cut granuFoam to fit the size of the wound to exudate from touching the skin.
8. The hole is cut to fit the size of the trac pad to enhance a better seal and prevent leakage.
9. Trac pad is connected to the machine because the machine provides pressure.

10. Proper diet (especially protein promote wound healing).

**(3 points)**

**1 alternative primary/secondary dressing:**

1. Apply Holister Hydrofera Blue Ready Foam dressing .
2. Covered the foam with Medline Extra Absorbent Abdominal pad (ABD pad).

**(1 point)**

3.5/8 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 *ok*

**(1 point)**

### **Wound Nurse recommendations/orders:**

- 1- Gently clean the affected area with ReadyBath Luxe (Antibacterial bathing cloth) after each bowel movement.
- 2- Keep stool away from the wound.
- 3- Apply Medline Calazime Skin protectant paste to the damaged area.
3. Cover with Medline Extra Absorbent Abdominal pad (ABD pad).
4. Secure with 3 M Medi pore H soft cloth surgical tape 4x10 yards.
5. Change dressing daily and as needed.
6. Turn and reposition patient every two hours
7. Low air loss mattress
8. Nutritionist consult for evaluation and treat
9. Administer pain management as ordered.
10. Monitor for signs of infection (redness, swelling, increased exudate and pain).
11. Consult infection and disease control physician for c-diff management.

**(3 points)**

### **Rationale for choices:**

1. Managing c-diff will reduce the amount of fecal incontinence
2. Cleaning the per-area and keeping stool away from the wound, prevents infection.

3. Zinc oxides protects the skin from moisture and further skin damage.
4. Leaving the area open and the use of low air loss mattress will prevent heat from damaging the skin, and provide air to cool it down.
5. Turning and repositioning to redistribute pressure from the coccyx and scrotal area.
6. Adequate protein and calorie intake to support wound healing.
7. Pain management to reduce the pain and give patient comfort.
8. When stool get to the wound, it placed patient at risk for infection.

**(3 points)**

**alternative primary/secondary dressing:**

1. Apply Skin Protectant Ointment (Zinc Oxide 20%).
2. Cover with Medline Extra Absorbent Abdominal pad (ABD pad).
3. Secure with 3 M Medi pore H soft cloth surgical tape 4x10 yards.

**(1 point)**

6/8 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:**

Arterial ulcer

**(1 point)**

**Wound Nurse recommendations/orders:**

1. Check Ankle Brachial Index (ABI) of bilateral lower extremity
2. Clean wound with skin friendly PH, Vashe wound solution (N.Z.T 5.5) .
3. Apply Smith and Nephew, Collagenase Santyl ointment to the base of the wound.
4. Cover with Coviden Non-adherent Pad Prepack (Telfa).
5. Wrap with kerlix.
6. Change dressing daily
7. Check your blood sugar daily
8. Nutritionist to evaluate and treat.
9. Notify the physician for pain, swelling, and further skin break down.
10. Follow-up with vascular surgeon
11. Follow-up with the wound care nurse in two weeks.

**(3 points)**

**Rationale for choices:**

1. ABI for presence pulses and good circulation.
2. Non cytotoxin wound cleanser prevents tissue and cell damage
3. The enzymes in Santyl provides autolytic debridement of the dead tissues, before cleaning of the wound.
4. Managing and controlling blood sugar promotes wound healing.
5. A balance nutrition promotes wound healing.
6. Follow-up with vascular surgeon for further studies, evaluation and treat.

**(3 points)**

**1 alternative primary/secondary dressing:**

1. Apply 3 M Promogran Prisma Matrix, Collagen Alginate with oxidized regenerated cellulose (ORC) and silver.

2. Lightly moisten the Prisma with normal saline.
3. Cover the wound with McKesson woven gauze sponge, sterile 4x4.
4. Wrap with McKesson conforming stretch gauze bandages, Sterile 4x4.1 yards.
5. Secure with 3 M Medi pore H soft cloth surgical tape 4x10 yards.

**(1 point)**

4/8 points