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

Mini Case Scenarios: Wounds

Cleveland Clinic

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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, 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 with non-cytotoxic solution (e.g. NS) and pat dry
2- Apply Medi honey to the wound
3- Cover with sacral Allevyn gentle border
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 wait 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. Moisten Prisma with Normal saline and gently pack the wound.
2. Cover it with sacral Allevyn.
3. Change dressing daily.

(1 point)

2/8 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 skin barrier
3- Apply heel protector AKA (heel cup)
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

(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)

6/8 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. Perform conservative debridement
4. Apply an absorptive dressing (silver alginate). Cover with Drawtex
5. Apply compression (Unna boot toe to knee and secure with Coban). Wrap from the base of the to toes to just below the knee.
6. Keep dressing dry, do not get it wet.
7. Elevate your legs if they get swollen
8. Follow-up for dressing change in one weekly in the clinic

(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 tract of the treatment progress of the wound.
3. Debridement is done to remove the slough that prevents wound from healing. Slough also blocks treatment from penetrating the tissue.
4. Absorptive dressing helps in absorbing the drainage from the wound, and to keep it away from damaging the surrounding skin. Silver alginate is also an antimicrobial that will
5. Compression controls edema by pushing the fluids away from the legs, improves venous circulation and thus, promoting wound healing.
6. Dressing should stay dry because compression is supposed to be kept for seven days. If water touches it, it will smell.
7. Swollen legs are elevated to decrease edema and pain.
8. Compression dressing is removed in the clinic for a professional to assess and re-evaluate the wound for continuation of treatment.

(3 points)
1 alternative primary/secondary dressing: o UrgoClean Ag o Allevyn (Non bordered foam) o Apply two layer compression. **(1 point)**

/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 (Vashe) and pad dry
2. Measure wound and take photo of per patient's permission
3. Apply no sting skin barrier to peri-wound
4. Pre drape peri skin with clear dressing.
5. Cut black granulation foam to fit the size of the wound
6. Cover the foam with a tape
7. Cut a hole and apply suction as ordered.
8. Refer to a dietitian for evaluation and treat
9. Turn and reposition every two hours when in bed
10. Use Roho cushion when up in the chair
11. Place patient on a low air loss mattress

(3 points)

Rationale for choices:

1. Measuring and taking photo of the wound keeps tract of the treatment progress of the wound.
2. aping the skin around a wound 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.

(3 points)

What support surface would you recommend and why?

-- Low air loss mattress and Roho cushion.

(1 point)

/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 collagen gel with Prisma
3. Cover with Allevyn
4. Avoid shoes that will put more pressure to the open area

(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. collagen gel help to provide moisture to the wound while Prisma is an antimicrobial property.
3. Allevyn provides cushion and protection

(3 points)

alternative primary/secondary dressing

1. Apply adaptic non-adherent dressing directly to the wound.
2. Place 4x4 gauze on top of it
3. Wrap it with conforming gauze and secure with Medi pore tape

(1 point)

/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
(1 point)

Wound Nurse recommendations/orders:
- Apply UrgoClean Ag.
- Cover with ABD pad
- Secure with Medi pore tape.
- Reposition patient every 2 hours
- Roho cushion for the wheelchair
- Low air loss mattress

(3 points)

Rationale for choices:
- UrgoClean Ag is an anti-microbial treatment that helps prevents microbial organisms from growing. The dressing also help to absorb any drainage.
- ABD protects the wound and gives it a cushion to prevent any further pressure.
- Repositioning helps take the pressure off the ischium.
- Roho cushion and low loss air mattress are used for pressure redistribution

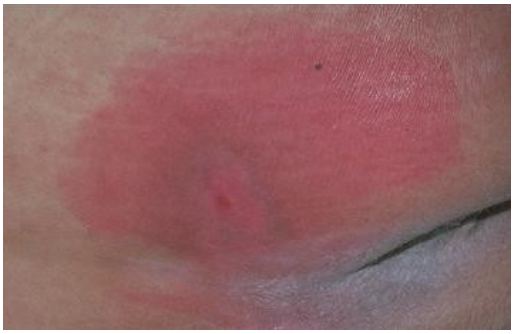
(3 points)

1 alternative primary/secondary dressing:
- Apply hydrofera blue
- Cover with ABD pad
- Secure with tape.

(1 point)

/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:
Pressure injury
(1 point)

Wound Nurse recommendations/orders:

- Cover the area with optic view transparent dressing
- Use hydrocolloid dressing
- Turn and reposition every two hours
- Nutritionist should evaluate and treat.
- Low air loss mattress and Roho cushion when sitting up in the chair

(3 points)

Rationale for choices:

- 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.
- Hydrocolloid dressing also protects the skin and gives it the cushion to prevent further tissue damage.
- Roho cushion and low loss air mattress are used for pressure redistribution
- Protein diets help promote wound healing

(3 points)

1 alternative primary/secondary dressing

- Apply cavilon skin barrier
- Leave it open to air
- Use Roho cushion when up in the chair
- Reposition every two hours

(1 point)

/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:
Incontinence associated dermatitis (IAD)
(1 point)

Wound Nurse recommendations/orders:

1- Consult the physician to obtain an order for Metronidazole.
2- Clean skin with a PH balance no-rinse cleanser and disposable soft cloth, then pad dry.
3- Apply no sting skin barrier (Cavilon), followed by pectin powder ("Crusting")
4- Use bedside commode
5- Nutritionist should evaluate and treat

(3 points)

Rationale for choices:

1- Metronidazole should help treat the C-Diff and thus, control the diarrhea.
2- A PH balance no-cleanser and the use of a soft cloth will help protect the skin from further damage.
3- Crusting helps protect the skin and keep moisture from damaging the skin.
4- Bedside commode to facilitate toileting, and schedule toileting if patient is able to sit up.
5- A nutritional evaluation and modification in nutritional intake will help improve wound healing.

(3 points)

1 alternative primary/secondary dressing:

- Apply moisture barrier ointment

(1 point)

/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:

1. Apply betadine all over the eschar, and let it dry
2. Cover it with heel protector (Allevyn heel cup).
3. Wrap it with gauze roll and secure it with tape.
4. Off-load heel using a multi-Podus boot

(3 points)

Rationale for choices:

1. Betadine helps prevent bacterial growth
2. Heel protector gives the heel the cushion and protect it from further skin damage.
3. To secure dressing in place.
4. Off-loading keeps pressure off the heel. Thus, preventing further damage.

(3 points)

1 alternative primary/secondary dressing:

1. Apply Cavilon advance to keep it dry and to prevent further skin damage.
2. Cover with gauze 4x4, wrap with kerlix and secure with a tape.

(1 points)

/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 dehiscence wound

(1 point)

Wound Nurse recommendations/orders:

1. Gather the supplies
2. Washe hand and done gloves
3. Assess wound/peri-wound, measure and take photo per patient's consent.
4. Apply Cavilon to the peri-wound and let it dry.
5. Cover the visible sutures with Mepitel sheet
6. Cut pieces of drapes and prep the peri wound skin.
7. Cut a black granuFoam to a size that will fit in the wound.
8. Apply black granuFoam to the wound and cover with a clear drape.
9. Cut a whole that fits the size of the trac pad.
10. Attach the trac pad to the open foam and seal it.
11. Connect it to the negative pressure machine and turn it on.
12. Nutritionist should evaluate and treat
13. 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. Line the surface of the wound with Cutimed Sorbact
2. Apply layers of 4x4 gauze on top
3. Covered with ABD pad.

(1 point)

/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

(1 point)

Wound Nurse recommendations/orders:

1- Contact the physician for c-diff management
2- Gently clean peri area after each bowel movement.
3- Keep stool away from the wound.
4- Apply zinc cream to the damaged area
5- Place patient on a chux pad and leave wound open to air.
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).

(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)**
1 alternative primary/secondary dressing: **1.** Take Metamucil powder as ordered to thicken stool **2.** Apply moisture skin barrier ointment **(1 point)**

/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 ABI of BLE
2. Perform monofilament test
3. Clean wound with non-cytotoxic wound cleanser (Vashe).
4. Cauterize the epibole with silver nitrate stick.
5. Apply enzymatic debridement (santyl) to the base of the wound.
6. Place an adaptic (oil emulsion) on top of it.
7. Cover with 4x4 gauze, and wrap with kerlix
8. Change dressing daily
9. Check your blood sugar daily
10. Nutritionist to evaluate and treat.
11. Notify the physician for pain, swelling, and further skin break down.
12. Follow-up with vascular surgeon
13. Follow-up with the wound care nurse in two weeks.

(3 points)

Rationale for choices:

1. ABI for presence pulses.
2. Monofilament test for sensations.
3. Non cytotoxin wound cleanser prevents tissue and cell damage
4. Silver nitrate prevents the exuberant of the skin along the edges of the wound. Thus preventing them from rolling in.
5. Santyl will clean the wound by debriding the dead tissues.
6. Adaptic prevents gauze from sticking to the wound.
7. Elevated blood sugar prevent wound healing.
8. A balance nutrition promotes wound healing.
9. See vascular surgeon for further studies and evaluation

(3 points)
1 alternative primary/secondary dressing: 1. Refer patient to Hyperbaric Oxygen Therapy **(1 point)**

/8 points