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

Mini Case Studies: Ostomy

Cleveland Clinic

Student Name & Date:_
Reviewed by:_____
Score: /40

For the following Ostomy patient case scenarios:

- Apply Ostomy characteristics provided to identify an ostomy pouching plan for the patients below.
    - Be specific: It is important to note a pouching system is a skin barrier wafer and a pouch. A complete answer should include both unless otherwise indicated. Include the manufacturer and full, product name. Product numbers should not be used. Make sure to include accessory products as needed.
    - When providing Rationale: Describe abdominal characteristics, stoma characteristics, and one other reason why you would choose the specific system.
- The first half of the first case study has been completed for you below as an example:

Scenario 1

55-year-old with a history of colon cancer. Colostomy was created 2 months ago and presents today in the ostomy clinic for assessment and management. Pt is very active and would like to consider a more flexible pouching system. Pt is changing his pouching system every other day because he is fearful of leakage.

Assessment: Stoma is pink, budded, and protrudes above skin level. No erythema on parastomal skin. No reports of leakage.

Identify a one and two-piece pouching system option along with rationale for choice.

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

One Piece System: *Hollister Premier one-piece drainable pouch flat Flexwear barrier with clamp closure, change Twice a week, or more or less frequently for leakage.*

Rationale: *This system is flexible and matches the contours of this patient's abdomen. It is appropriate for budded stomas with an even peristomal plane and is manufactured for wear for multiple days.*

Two Piece option: Coloplast SenSura Mio Flex barrier with a Sensura Mio Flex drainable pouch. Change every 3-7 days.

Rationale: This system allows for removal and replacement of the drainable pouch as desired. It is flexible and the adhesive on the barrier is also flexible. The pouch does not feel wet in the shower and may have a similar feel related to sweat. The pouch moves with the contours of the abdomen as they may change with exercise and activities

/2 points

Scenario 2

42-year-old with stoma placement on <u>soft</u>, obese abdomen.

Assessment: Stoma pink, budded, and protruding. Edema and necrosis circumferential at stomal edge. Serosanguineous drainage in pouch. Skin barrier wafer removal notes being cut too small, restricting and causing trauma to the stoma.

Identify a one and two-piece pouching system option along with rationale for choice.

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

One Piece option: Hollister 1-piece, 12 inch Premier Soft Convex, Ultraclear cut to fit, lock and roll closure, change every three days or twice a week

Rationale: This appears to be a new stoma that may have significant swelling post op as the surface has suffered some necrosis and the edges some trauma. This soft convex one-piece system is transparent so that patient can more easily see the stoma and any visible peristomal skin so that the patient can assess whether it is up too tight against stoma or too large with peristomal skin exposed. Soft convexity will conform to any change in shape that this soft abdomen assumes. Sizing and cutting of barrier will be reviewed. Change pouch every 3 days so that correct size can be determined frequently for the first 6 weeks.

Two Piece option: Hollister New Image Formaflex Shape to fit skin barrier with a 12-inch New Image drainage pouch, lock and roll Microseal closure, without filter, but with belt tabs, transparent.

Rationale: This two-piece system does not have to be cut, but is shaped to fit and flexes to fit the stoma. It negates the need to cut the barrier. The transparent bag allows patient to be able to view stoma for swelling or shrinking. It has belt tabs if belt is needed to secure the pouch against a soft abdomen.

/4 points

Scenario 3

85-year-old presents with flush ileostomy and peristomal irritant dermatitis. Oval stoma with os low at 6 o'clock location. Protuberant hernia above further pushes the stoma into a lateral fold.

Pt wears bifocal glasses when applying the pouching system. Due to extreme hip contours, it is difficult to have a hernia belt stay in place.

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

Pouching recommendations: One-piece Coloplast Sensura Mio extended wear Maxi drainable pouch with deep convexity, transparent. Change twice a week.

Rationale: This one-piece transparent system limits number of steps in application but is transparent so that patient can more easily see the stoma, and any exposed peristomal skin through the pouch. The barrier has deep convexity, but is flexible. These characteristics make the pouch more likely to accommodate the contours, hernia, and folds that affect this stoma. I would change twice a week or with leaks. This system does have belt tabs, but all the deep convexity in this line of products have belt tabs. This does not mean a belt has to be used.

/2 points

Scenario 4

56-year-old obese individual with ruptured diverticulitis. A red rubber catheter in place as a bridge for the loop ostomy. Stoma is slightly budded and red. Peristomal skin with erythema and partial thickness wound 4-7 o'clock Etiology may be due to trauma from red rubber catheter movement.

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

Pouching recommendations:

First, check with surgeon to see if red rubber catheter can be removed.

Second, Clean peristomal skin with water, crust macerated skin with stoma powder and cavilon, use a stoma ring to book end the catheter and cover macerated red skin. Cut a New image Hollister 2-piece ceraplus flat skin barrier to size, accommodating the red rubber catheter, if it cannot be removed. Ensure that the red rubber catheter is secured within the aperture of the barrier. Attach a Hollister New image, Lock and Roll, microseal closure, drainable pouch without filter but with belt tabs.

Rationale: This new loop stoma, colostomy or ileostomy, has a red rubber catheter; if it can be removed then pouching is easier, but if it cannot, then a two-piece transparent cut to fit flat Hollister pouching system is a good option. The ceraplus maintains skin moisture balance, and protects skin as it heals. The transparent bag allows for visualization of the stoma and using a stoma ring prevents the catheter from moving and rubbing against the peristomal skin. Crusting allows the denuded skin to be protected while it heals, and dries any moist areas for better adherence of the barrier. The peristomal skin plane appears to be flat, so convexity is not necessary.

/2 points

Scenario 5

42-year-old arrives in emergency room with complaints of difficulty pouching and peristomal skin irritation. Current pouching system sometimes has less than 4 hours of wear time. Skin is very painful. Assessment finding of ulcerated skin around stoma. Stoma is at skin level on a firm abdomen. Patient acknowledges frequent sweating resulting in the need to change appliance. "It just doesn't seem to stick".

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

Pouching Recommendations: Remove pouching system with adhesive remover to avoid stripping the sensitive skin under the barrier. Clean peristomal skin with water and irrigate ulcerated areas with saline, crust with stoma powder and cavilon. Apply 2 piece, Hollister New Image Flextend extended wear convex barrier and New Image lock and roll, microseal closure without a filter.

Rationale: This extended wear barrier is designed to absorb more moisture from sweat and drainage and the convexity will help to maintain a seal. Even though the barrier is for extended wear, I would still change in every 3 days until ulcerated skin is healed. Changing with this frequency allows for peristomal skin evaluation for fungal or bacterial infection and for observation of ulcer healing. Once peristomal skin ulcer is healed, this extended wear barrier may be left on for longer and cavilon is not needed once crusting is not necessary

/2 points

Scenario 6

66-year-old obese individual with stoma in an abdominal fold. Appliance leakage causing contact dermatitis. Wear time has been less than 8 hours. Irritation is painful.

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

Pouching Recommendations: This stoma is in a crease. It is leaking. One approach would be to use a firm convexity after filling in the crease with stoma ring to flatten the contour. The option I would try first is a more flexible one-piece system with a barrier sheet to protect the peristomal skin. Specifically, Remove the pouching system with adhesive remover, wash the peristomal skin with water. Crust with stoma powder and cavilon to dry any macerated skin or areas of partial thickness IAD. Cut Hollister Hollihesive 7700 with an opening the size of the stoma and apply as a base layer. Then apply a one piece, cut to fit, Hollister Premier soft convex pouch system. As skin heals, Hollihesive 7700 may not be needed.

Rationale: This one-piece soft convex system is designed to take whatever shape the body takes, so it can accommodate creases. If this stoma was flush to the skin, then the hollehesive would make the barrier too thick, I would try both with and without Hollihesive and have the weartime goal be at least two days.

/2 points

Scenario 7

76-year-old presents to the ostomy clinic with peristomal redness to periphery. Irritation limited to appliance tape collar region. Satellite lesions present. Stoma is budded and round. States has had ostomy for 6 months and has not had any problem until recently after Home Health changed the products.

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

Pouching Recommendations: Remove pouching system with alcohol free adhesive remover, wash peristomal skin with water and allow to dry. Crust reddened areas with mycostatin powder and cavilon. Apply a two-piece system with New image Extended-Wear flat skin barrier, specifically without a tape border, and a New image lock and roll, microseal closure drainage pouch with or without a filter, transparent or opaque.

Rationale: The above redness appears to be under a tape border, so a barrier without a tape border is indicated. The satellite lesions are consistent with candida, so crusting with mycostatin powder should resolve the secondary candida.

/2 points

Scenario 8

Individual presents to the clinic with stoma measuring 3.5 inches. Stoma protrudes above skin level. Uneven peristomal contours with skin folds at 3 and 9 o'clock. Moisture-related skin damage on peristomal skin related to leakage.

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

Pouching Recommendations: Remove pouching system with adhesive remover. Clean peristomal skin with water. Crust any macerated skin with stoma powder and cavilon. Apply a 2 piece convex pouching system, specifically, Hollister Flextend extended wear Convex barrier and New image, lock and roll, microseal closure drainage pouch. Upgraded version of barrier that accommodates cavilon is preferred. I would use belt, with this pouching system

Rationale: This stoma requires convexity as the skin bulges superiorly, and creases are present at 3 and 9. Creases may need to be filled in with stoma ring material. Try without stoma ring filler first, as less is best.

/2 points

Scenario 9

Patient presents to ostomy clinic due to peristomal hernia causing peristomal skin breakdown. Abdomen is firm. Appliance wear time has decreased since parastomal hernia development. Stoma is flush with skin. Os between 5 and 6 o'clock area. Complains of odor. "The odor is really bad when I empty the pouch".

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

Pouching Recommendations: Remove pouching system with adhesive remover, clean peristomal skin with water and apply cavilon skin barrier film, let dry. Cut to fit a one-piece Sensura Mio Convex Flip MAXI Drainable Pouch, spray inside of pouch with Covatec Esenta Lubricating deodorant to neutralize odor. Apply system. Consider a stoma ring to create a super soft pseudo convexity.

Rationale: This stoma system is designed to accommodate parastomal hernia and remain somewhat flexible. The deodorant spray recommended has a mild scent that many tell me is quite effective and reassures them regarding odor. Poo pouri is another room deodorant that neutralizes odor, but is just for misting in the room when pouch is changed or emptied, not to be put in pouch.

/2 points

Scenario 10

A pediatric Individual presents to the emergency room with stoma prolapse. Caregiver expresses inability to apply pouching system related to stomal protrusion. Stoma is red and healthy. No peristomal irritation.

Identify one pouching system with rationale for choice along with one consideration with appliance application specific to a prolapsed stoma.

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

Pouching Recommendations: Remove pouching system with Brava Baby Adhesive remover, wash peristomal skin with water, apply cavilon skin barrier to peristomal skin, Cut to fit Hollister Pouchkins 2 piece system: Pouchkins Infant/Child Ostomy two piece barrier and either a 6 ½ inch Pouchkins Two Piece infant Ostomy drainage pouch or a 7 inch Pouchkins Ostomy pouch with integrated waterproof filter. I would choose the size based on the length of the prolapsed stoma. This is a loop stoma, so pouch should be cut to cover peristomal skin, the stoma shape appears oval. Once cut to fit, cut radial slits on the barrier so that as the stoma protrudes and retracts, the barrier will accommodate the change in size.

Rationale: This stoma will protrude and retract based on baby being awake or asleep, crying or active. Radial slits accommodate a stoma that changes in size with activity or rest.

Further Consideration: This stoma is healthy with good blood flow. Parent should be educated tor recognize change in color: dusky, blue, purple, pale. These changes in color can indicate loss of blood flow to the stoma, which warrants immediate evaluation with a provider. With the baby resting and not crying, a pinch of sugar on this stoma may cause it to retract, some gentle pressure on the distal stoma my also encourage retraction. If the stoma reduces even a little bit, the pouching system will be easier to apply. Caution parent to cut pouching system large enough to accommodate the stoma without injuring it.

/3 points

Scenario 11

A 28-year-old with an ileostomy presents to the clinic for a follow-up evaluation. During the visit, the patient expressed the pouch is too long with the end of the pouch falling into the groin area. Assessment notes stoma red, viable, and protrudes above skin level. Abdominal space is small with short distance from stoma to groin. Current appliance is a one-piece cut to fit skin barrier. Pouch length 12". Name at least two alternative pouching management system options and rationale for each.

Image courtesy of Judy Mosier, MSN, RN, CWOCN

Pouching option #1: Hollister one piece: 9-inch Premier Mini drainable pouch with flat skin barrier and without a filter.

Rationale: This system has an extended wear flexible barrier (Flextend) and a smaller pouch, so it will not hang as low as the standard 12 inch pouch. It is a clamp closure.

Pouching option #2: Hollister one piece 7-inch Premier Lock-n-roll Microseal Closure Mini Drainage Pouch with flat skin barrier.

Rationale: This is and even smaller pouch with a lock and roll closure that is more flexible and may be more comfortable if it rests low to the groin.

Additional thoughts: Because this is an ileostomy. Effluent needs to be considered. Some long-term ileostomy put out pasty thick effluent, others are chronic high output and the effluent is more liquid. If The effluent is liquid, I would look for a two piece convex system and consider a belt to reduce leakage risk. If a Hollister convex barrier is needed, there are drainable pouches for two piece systems that are both 9 and 7 inches as well.

/4 points

Scenario 12

You are in your office and take a call from a patient. The patient voices having to change the skin barrier wafer more frequently, itching under the skin barrier, and desire to change manufacturers. The patient agrees to be seen in the clinic.

In preparation for this visit, you go to your resources to help you.

1. **Identify one manufacturer (Hollister, Convatec, Coloplast, NuHope, etc)**
2. **Identify three skin barrier wafers from that manufacturer that differ in composition/ingredients.**
3. **Identify the type of ostomy or situation in which the wafer is appropriate.**

For example: (can not be used)
Manufacturer: B. Braun
1. Skin barrier wafer: Flexima 3S

Composition & Purpose: Made of new generation plastics making it more soft and flexible. Appropriate for any type of ostomy and active individuals

2. Skin barrier wafer: Flexima… etc

Manufacturer: Hollister

Skin barrier Wafer 1: New Image Flexwear

Composition & Purpose: Latex free hydrocolloid, standard wear barrier designed for use greater then one day, comes with or without tape border, comes in flat and convex, designed to be used without skin barrier, but upgraded convex design can be used with skin barrier film.

Skin barrier Wafer 2: New Image Flextend

Composition & Purpose: Flextend is a latex free hydrocolloid product that is a synthetic material whose molecules are especially cross linked to better absorb fluid and resist erosion. It is covered with Elastaflex which also resists erosion. It is designed to be an extended wear barrier. It also comes with or without tape, flat or convex, and is designed to be used without a skin barrier film, but an upgraded variety can be used with skin barrier.

Skin barrier Wafer 3: New Image CeraPlus

Composition & Purpose: This barrier is synthetic, latex free, hydrocolloid infused with Ceramide. The hydrocolloid is designed to maintain adhesion. The ceramide protects the skin by maintaining moisture balance. It is also soft and flexible. It come in tape and tape free border, flat and convex, and can be used with skin barrier.

/6 points

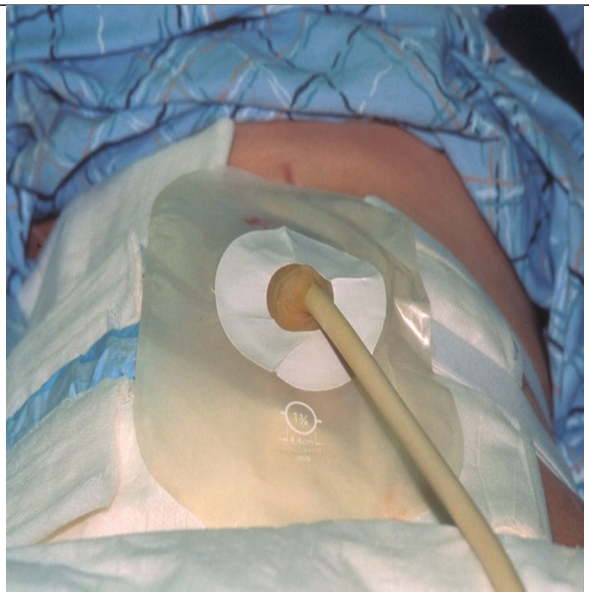


Image courtesy of Judy Mosier, MSN, RN, CWOCN

You are consulted to see a patient with a new colostomy. Upon entering the room, you note there is an indwelling catheter in the stoma. Nursing reports pouch leakage as the hole in the pouch for the tube is cut to fit the stoma resulting in a "big hole" in the front of the pouch. The surgeon's request is to continue to pouch the stoma while pulling the tube through the pouch.

Describe how you will secure the tube while separately pouching the stoma and the tube…

…using a commercial access port: Gather supplies: New Hope Latex Catheter holder, a two-piece Hollister New Image Ceraplus flat skin barrier and lock and roll 12-inch drainable transparent pouch. wet and dry disposable wash clothes, cavilon skin barrier, adapt stoma powder, Hytape (water resistant tape), stoma size guide, scizzors, adhesive remover wipes.

1. **Remove current pouching system and bandages using adhesive remover as appropriate, use care to**

not dislodge the catheter that is intubating the colostomy.

2. **Examine the stoma and peristomal skin.**
3. **Size stoma and cut barrier to size**
4. **Wash peristomal skin with water and pat dry**
5. **Crust any macerated or damaged skin with stoma powder and cavilon (only if needed), allow barrier film to dry**
6. **Remove backing from skin barrier and thread catheter through the aperture of the barrier. Apply barrier side of pouching system to skin.**
7. **Cut an X shaped opening in the drainage pouch positioning it over the stoma. Apply the New hope catheter holder over the the X. Cut the catheter holder to accommodate the catheter. Pull catheter through catheter holder, snap down drainage pouch on flange side of pouching system**
8. **Use Hytape to seal the catheter tip opening around the catheter.**

…in the absence of a commercial access port: Follow all but step 7. When using a baby bottle nipple, step seven should read: Cut an X shape opening in the drainage pouch, immediately over the stoma. Cut the baby bottle nipple to accommodate the catheter. Pull the catheter through the drainage pouch and snap down pouch. Then pull the catheter through the baby bottle nipple and secure the nipple to the pouch using Hytape. Step 8 not necessary.

/2 points

86-year-old obese individual presents to the ostomy clinic with a retracted stoma. States has a soft-formed stool once a day. Pouch changed daily as stool goes under the skin barrier wafer, and at times, no stool goes into the pouch.

It is determined a convex pouching system should be used. A convex skin barrier wafer is not available.

Identify two strategies to create convexity in the absence of a convex skin barrier wafer.

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

Alternative convexity option #1: Cut to fit a flat pouching system and use 1-2 stoma rings stretched to over

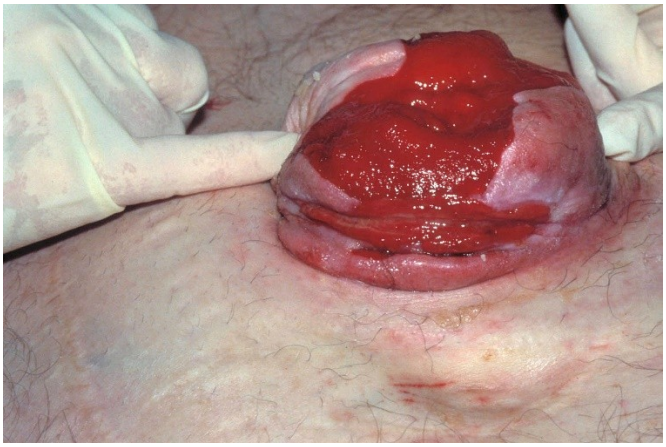
the immediate peristomal skin, layer if two are used. May put stoma rings down on skin or on backside of barrier. Use belt to hold system in place.
Alternative convexity option #2: Adapt CeraRing Convex Barrier ring between skin and flange skin side of pouching system as well as a belt to keep secure.
/2 points

The WOC nurse is consulted to manage a wound with a stoma in proximity. The surgeon has consented to pouching the stoma in the same pouch as the wound. It is determined to be the best approach.

Identify one product that can be used to achieve this.

Image courtesy of Judy Mosier, MSN, RN, CWOCN

Pouching option: Coloplast Fistula and wound management system
/1 point



A 70-year-old patient presents to the ED with pouching difficulty. They report using a fistula pouch previously, however, this has become too costly of an option. Their stoma measures 4 1/3" in diameter and they are at a loss for pouching options. The patient will need pouching long term. Identify one product that is manufactured to accommodate a stoma of 4" or greater in size.

Image courtesy of Dr. James Wu

Pouching option: One Piece Hollister 12-inch Premier Cut to fit, High-output with soft tap without filter, Ultra Clear. Stoma Size: up to 4 1/3 inches.

/2 point