

How to Assess the Patient with a Fecal Diversion

This resource will assist you in assessing a patient with a fecal diversion (ileostomy or colostomy). You'll have the opportunity to learn what assessment questions to ask and the rationale for asking questions. In addition, this resource provides suggestions for referrals and/or interventions.

Overall Assessment

- 1. Where is the stoma located in the GI tract? This information will help you to assess the function of the stoma, and the amount and consistency of the stoma output.**
 - a. Small intestine
 - i. Is all of the small intestine in place? Have there been small bowel resections in the patient's history? Is the opening in the ileum? i.e. an ileostomy (other options such as a jejunostomy which is an opening from the jejunum)? This information will help you determine the normal output from the stoma.
 - b. Large Intestine
 - i. Is the stoma in the colon and if so, which of the following sections? ascending, transverse, descending, or sigmoid?
 1. The farther away from the small intestine, the thicker the stoma output can be if there have been no bowel resections in the past.

- 2. What is the approximate daily output of the stoma? This will help determine if the patient is trending towards dehydration or in some cases, constipation (which could reflect strictures).**
 - a. Assessment questions:
 - i. What is the normal consistency of the stool? Pasty, thick or formed and what percentage is pasty, thick or formed?
 - ii. What is the volume of the stool in a 24-hour period? You can ask how often they empty the pouch. For instance, if the person with an ileostomy empties their pouch when 1/3 full (wearing a regular length pouch), the output volume is generally about 200 ccs at each pouch emptying.
 1. Normal output for a patient with an ileostomy is approximately 1200 ccs in 24 hours for the person with the entire small bowel in place. Larger amounts and more than 80% liquid output can be of concern for the development of dehydration due to high output.

(see below for interventions for management of the patient with high output)*

2. Output for the person with a colostomy will depend upon the location of the stoma in the GI tract. The closer to the small intestine the stoma is located, the more liquid the stool will be as the stool moves closer to the rectum (in the person with normal bowel function and no resections) the less often the stool will be discharged and the stool will have more form or shape.

***High Output Management**

In order to manage the patient with a high stoma output, determine the etiology. Etiologies may include overgrowth of bacteria, short gut from disease, and/or surgical resection. Consider the following interventions for the plan of care¹:

- Snacking during the day instead of 3 full meals
- A generous volume of complete carbohydrates such as paste, rice potato, bread products
- Limit sugar intact
- Drink fluids after meals, not during meals. Do not drink fluids alone, take some food with fluids, especially when snacking
- Drink rehydration fluids
- Use antidiarrheals 30 minutes before meals and consider using before bedtime

3. What is the type of stoma?

- a. There are several types of stoma that can be created based upon the indication for creation
 - i. End stoma: the end of the intestine or colon is brought to the skin surface
 - ii. Loop stoma: a loop of the large or small bowel is brought to the skin and a support bridge is initially placed to support the bowel until healing (in place for up to 3 weeks post op). This type of stoma is generally a temporary diversion (rerouting stool away from the area of active disease).

4. Stoma management:

- a. How often do you change your pouching system?
 - i. The average wear time is 4 days. If a person is changing more often, this may indicate a problem with the current pouching system. If the wear

time is significantly longer than 4 days, this may indicate a problem and the patient should be referred to the Wound Ostomy and Continence (WOC) nurse.

- b. Do you encounter pouch seal leaks and if so, how often?
 - i. A pouch seal should not leak from the time that the patient places the pouching system on to the time they take it off; if they report frequent leakages, they should be referred to a WOC nurse.
- c. What type of pouching system are you using?
 - i. One piece system: pouch and adhesive are one unit. They are available in a cut to fit adhesive (can be adjusted to the changing size of the stoma as it heals or can be cut oval if the stoma is oval) or precut round. The opening in the skin barrier should be fitted at the skin stoma junction to prevent leakage onto the peristomal skin.
 - ii. Two-piece system: the pouch and adhesive are separate. The pouch attaches to the skin barrier with a plastic or adhesive flange. The skin barrier can be cut to fit or precut.
 - iii. All pouches are available with the following types: closed end, drainable, clear, and opaque, with a gas filter, short (9"), regular length (12"), and for high output.
- d. The pouch adhesive is available in a flat or convex shape. Convex is used if the area around the stoma is uneven or creased or if the stoma does not have adequate protrusion.
- e. There are several accessories that can be used to help achieve a good seal including skin barrier rings (fit around the stoma to secure the inner seal), barrier strips (applied to the outer edge of the pouching system to secure the outer seal), and belt (applies to the adhesive for a secure seal).

5. Stoma and Peristomal Skin Assessment

All patients coming to an outpatient visit should be told by the schedulers to bring a change of an ostomy pouching system with them. This will allow them to remove the pouching system and for you to assess the stoma and peristomal skin.

1. Stoma: important to assess as it is the end of the GI tract.

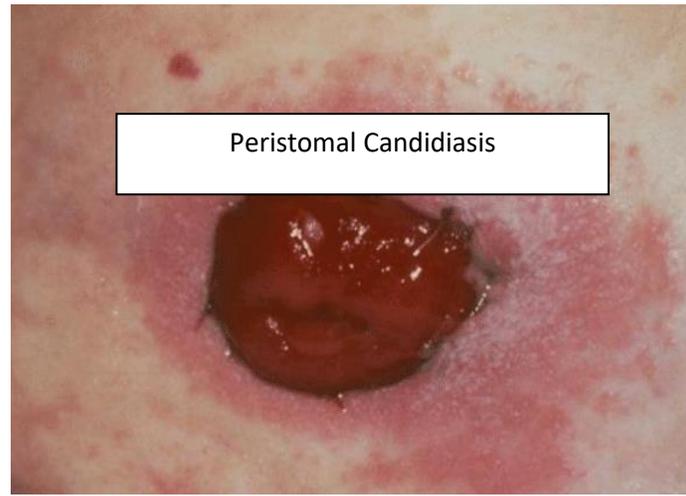
- a. A stoma should be red and moist, as the stoma is created by inverting the stoma and attaching to the skin. Thus, the stoma is the inner lining of the intestine or colon.
 - b. The stoma is edematous in the post-operative period; the edema will decrease over a 4-6 week period, but will remain red.
 - c. The stoma has no nerves in it and will not feel pain.
2. Peristomal Skin: the peristomal skin should be intact with no openings. The skin may be pink because of the adhesive removal.



*Image courtesy of Janice Colwell, University of Chicago

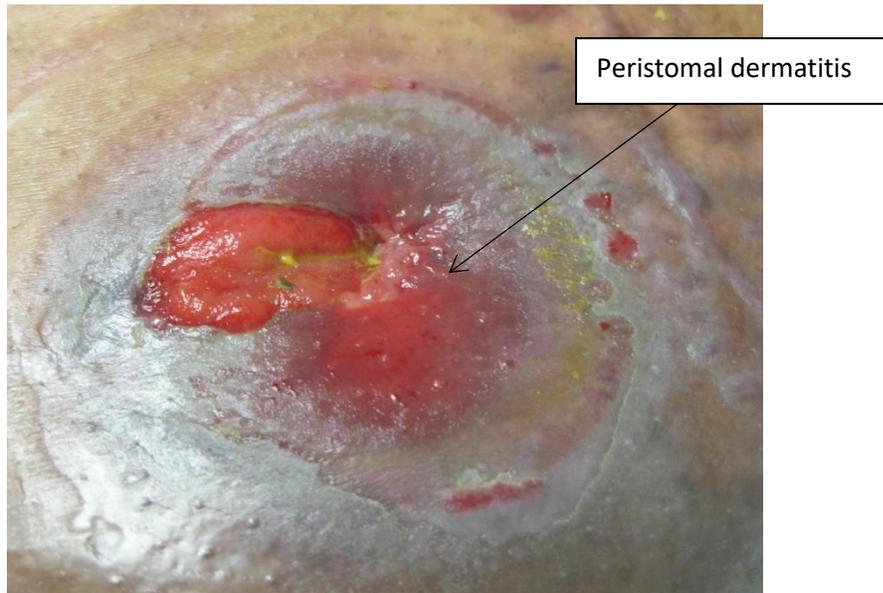
6. Peristomal Skin Issues

Peristomal candidiasis: an overgrowth of candidiasis on the skin that is covered by the pouching system. Risk factors: oral steroids, antibiotics, and moisture under the pouch seal. Presentation: papules that can coalesce into a rash with satellite lesions; patient reports itching. Treatment: nystatin powder to the area at pouch change, sprinkle onto skin, rub in, and brush off excess. Treat until the skin starts to flake.



*Image courtesy of Janice Colwell, University of Chicago

Peristomal dermatitis: loss of skin in area of stool contact with the skin. Presentation: red and moist denuded skin that patients report as burning or itching. Patients find that their pouch seal leaks. Treatment: determine the reason for the leakage (referral to a WOC nurse) and use skin barrier powder; rub this into skin and seal with a liquid skin barrier. For severe peristomal dermatitis consider the use of a topical spray steroid (avoid creams or ointments that will interfere with the pouch seal) such as triamcinolone.



*Image courtesy of Janice Colwell, University of Chicago

Stoma retraction: a decrease in the stoma size - significantly smaller than it has been in the past. Presentation: small stoma; patient notes discomfort when stool passes or the stoma is very noisy when the stool or gas passes. Considerations: this may be related to recurrence of disease and a work-up can be considered (for example: might be stenosis/stricture from Crohn's disease recurrence).



*Image courtesy of Janice Colwell, University of Chicago

Peristomal pyoderma gangrenosum: an inflammatory skin complication of unknown etiology thought to be related to inflammatory bowel disease. Presentation: full thickness ulcers in the peristomal area, large volume of drainage, undermining with skin bridges, and purple discoloration around the ulcers with pain. Considerations: pyoderma is thought to be an inflammatory process and the treatment should include addressing the inflammation with oral steroids or immunosuppressive therapy. Topical therapy includes triamcinolone paste in the ulcers or pimecrolimus (Elidel) cream in the ulcer covered with non-adherent foam. A work-up should be considered for a patient who presents with peristomal pyoderma and a referral to the WOC nurse should also be considered.



*Image courtesy of Janice Colwell, University of Chicago

References:

¹ Parrish, C. R., & DiBaise, J. K. (2017). Managing the Adult Patient with Short Bowel Syndrome. *Gastroenterology & hepatology*, 13(10), 600–608.

Additional Resources:

1. *Peristomal Skin Assessment Clinician Guide*: A mobile tool that provides basic guidance to clinicians on identifying and treating peristomal skin complications, including instructions for patient care and conditions that warrant referral to a WOC/NSWOC (Nurse Specialized in Wound, Ostomy and Continence). The tool walks the clinician through assessment steps and suggests what peristomal skin complication has been found with interventions by using an algorithm. <http://psag.wocn.org/index.html#home>
2. *Peristomal Skin Assessment Consumers Guide*: A free online guide for individuals living with an ostomy, that empowers them to be proactive about their health. The guide is designed to help people with an ostomy understand and identify common skin problems that may occur as a result of having an ostomy. It provides an overview of next steps in skin care management and prompts individuals to seek further medical attention from a wound, ostomy and continence (WOC) nurse. <http://psag-consumer.wocn.org/#home>
3. *Referral to a wound ostomy and continence nurse*: Wound Ostomy and Continence Nurses Society data base of clinicians who accept referrals. https://www.wocn.org/page/Nurse_Referral
4. Text: Wound Ostomy and Continence Nurses Society Core Curriculum Ostomy Management, Carmel J, Colwell J, Goldberg M. Wolters Kluwer Phil, 2016. Basic ostomy care includes management, peristomal and stoma complications.
5. Article: Parrish, C. R., & DiBaise, J. K. (2017). Managing the Adult Patient With Short Bowel Syndrome. *Gastroenterology & hepatology*, 13(10), 600–608.

Acknowledgement:

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