How confident are you about caring for a patient with a colostomy or ileostomy? Although the systems used to manage them differ, the principles of ostomy care are similar. In this photo guide, I'll demonstrate what you need to know to change an ostomy pouching system.

Looking at the appliances
Ostomy pouching systems consist of a drainage pouch and a skin barrier that protects the skin and holds the pouch against the skin. A one-piece system has the skin barrier and pouch attached; a two-piece system has a skin barrier and a pouch with flanges used to attach them.

Drainable pouches have a clamp or closure for frequent emptying. Closed pouches, which must be removed and discarded, are best for less frequent drainage.

A flat skin barrier is used when the stoma protrudes at least 1 inch (2.5 cm) from the abdomen. A convex skin barrier, which increases pressure on the peristomal skin, is sometimes necessary for a better seal if the stoma lies flat or protrudes less than 1 inch. To prevent tearing the mucocutaneous junction, a convex skin barrier shouldn't be used for at least 4 weeks after ostomy surgery, and a certified ostomy care nurse should fit the patient for this type of system.¹

A precut skin barrier is manufactured to a particular stoma size, such as 3⁄4 inch or 1 inch. This type isn't recommended for recently created stomas, which shrink for 6 to 8 weeks postoperatively, and it generally isn't used for stomas that aren't round. A cut-to-fit skin barrier with a “starter” hole may be used for various stoma shapes and sizes. A cut-to-fit skin barrier is recommended for the first 6 to 8 weeks while stoma edema is resolving; during this time the stoma should be measured frequently using a stoma measuring guide, which comes with the system.
Changing the pouch
Getting good adhesion of the skin barrier is vital to changing an ostomy pouch. Explain the procedure to the patient and involve her if possible. Place her in a comfortable position. Ask a coworker for help if necessary and observe standard precautions throughout the procedure.

1. Gather the equipment:
- gloves
- pouching system (with end of pouch closed)
- warm water and a soft cloth, gauze, or wipes (soap or wipes shouldn’t contain oil or lotions that can interfere with adhesives)
- skin barrier wipe, if indicated by the manufacturer (applies a film that aids adhesion of the skin barrier and later removal)
- scissors
- dark marking pen
- stoma measuring guide or pattern (for a new ostomy or a cut-to-fit system)
- emptying container
- plastic bag for disposal
- stoma paste, if indicated, as filler to smooth the surface (not shown).
2. **Do all you can** before removing the current pouching system:
   - Perform hand hygiene and put on gloves.
   - If the current pouch is drainable, empty the contents, as shown.
   - If the ostomy was created within the past 8 weeks, look at the current pouch and inspect the skin barrier opening, which should clear the stoma by \( \frac{1}{16} \) to \( \frac{1}{8} \) inch. If more than \( \frac{1}{6} \) inch of skin is showing, consider cutting the new skin barrier a bit smaller than the pattern to allow for stoma shrinkage.
   - If necessary, make or modify a pattern for the stoma (see Using a pattern to properly size the skin barrier). Use the ostomy sizing guide found in the box of pouches to measure the stoma.
   - If using a cut-to-fit skin barrier, cut it so the opening will clear the stoma by \( \frac{1}{8} \) inch all around.
   - Open the skin barrier wipe, if indicated.
   - Wet the cloth or gauze or ready the wipes for use.
   - Close the new pouch if it allows drainage.

**Using a pattern to properly size the skin barrier**

If your patient’s stoma isn’t perfectly round, you can use a transparent measuring grid or even an index card to make a reusable pattern. Generally you’ll also use a pattern and a cut-to-fit pouch in the first 6 to 8 weeks postoperatively. After 8 weeks, stoma size typically remains the same and you may use a precut skin barrier if the stoma is round.

**Making the pattern.** Use a sturdy piece of paper, an index card, or the clear, sturdy package material from the skin barrier. (Pattern making is easiest with clear pattern material.) Mark the pattern “top,” “right,” “left,” and “face up” or “front” so others will always use it correctly.

Place the pattern material on the patient’s stoma. Using a dark pen, **trace the stoma opening onto the pattern material** (shown at left). Remove the pattern from the patient and **cut out the stoma pattern**, being sure to cut inside the line you made (shown at right).

**Using the pattern.** Place the pattern onto the skin barrier’s cutting side. **Use the dark pen to trace the pattern within the stoma cutoff (shown at left).** Keeping in mind that you can cut out more but can’t replace what you’ve cut, carefully **cut the new opening** along the line you drew (shown at right). Use the pattern markings (“top” and so on) as a guide to make sure the pattern template is situated in the same manner as the stoma and skin barrier interface would be.

After comparing the pattern with the stoma, you may either use the pattern or modify it slightly for the current application if the stoma size has changed. Keep the pattern in a safe place.
Assessing the stoma

- The stoma should be moist and red or pink. Contact the practitioner immediately if it appears a dark color, such as purple, black, or blue.
- For a new stoma, yellow or blood-tinged mucus or dried blood on the stoma is normal.
- Stoma mucus secretion is normal.
- The peristomal skin should be free from redness or excoriation. If you note a rash, skin breakdown, or excoriation under the skin barrier, consult an ostomy specialist immediately; preserving the pouching surface is critical.

3. Gently remove the current skin barrier without pulling it straight off. Gently press the skin away from the barrier. If the pouch has a clamp, remove the clamp and lay it aside. Discard the pouch in the plastic bag.

4. Clean the peristomal skin with the wet cloth, gauze, or wipe. If the adhesive doesn’t come off easily, leaving it in place is safer than trying to pick it off, which can damage the skin. Clean the stoma as well, trying to remove all mucus. (Commercial wipes are available for removing adhesive, but never use them to clean the stoma.) The stoma may temporarily bleed slightly when cleaned. Contact the healthcare practitioner immediately if bleeding continues or the stoma discharge is bloody.

If necessary, clip (don’t shave) excessive hair from peristomal skin to aid adherence of the skin barrier. Pat the skin dry or let it air-dry. If applying a skin protective wipe, do so now and let it dry completely.

Assess the stoma and peristomal skin. See Assessing the stoma for details about normal and abnormal findings.

5. Remove the backing from the new skin barrier. (For a two-piece system, you may apply the skin barrier alone or connect the pieces and apply them as a unit.) Avoid touching the skin barrier adhesive. If the skin barrier has a tape border, leave it intact. If using stoma paste, apply it to your patient’s peristomal skin or to the skin barrier.
6. Center the skin barrier opening over the stoma, making sure it clears the stoma by $\frac{1}{16}$ inch to no more than $\frac{1}{8}$ inch. Using your fingertips, “walk” around the skin barrier to ensure good adhesion. If the skin barrier has a tape border, peel it off. If you need to connect the pouch to the skin barrier, do it now.

7. Warm the skin barrier adhesive to promote optimum wear time by holding it against the skin for 30 to 60 seconds. The pressure and warmth help activate the adhesive. Remove your gloves and dispose of the used equipment according to hospital policy. Perform hand hygiene.

Document the pouching system change in your patient’s medical record: the system manufacturer and part number, any other products used and why, the color and condition of the stoma and peristomal skin, the character and amount of the drainage, your patient teaching, the degree to which the patient participated in the procedure, and her tolerance of the procedure.

REFERENCE

RESOURCES
United Ostomy Associations of America, Inc.: http://www.uoaa.org
Wound, Ostomy and Continence Nurses Society: http://www.wocn.org
Web sites last accessed on November 6, 2008.

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