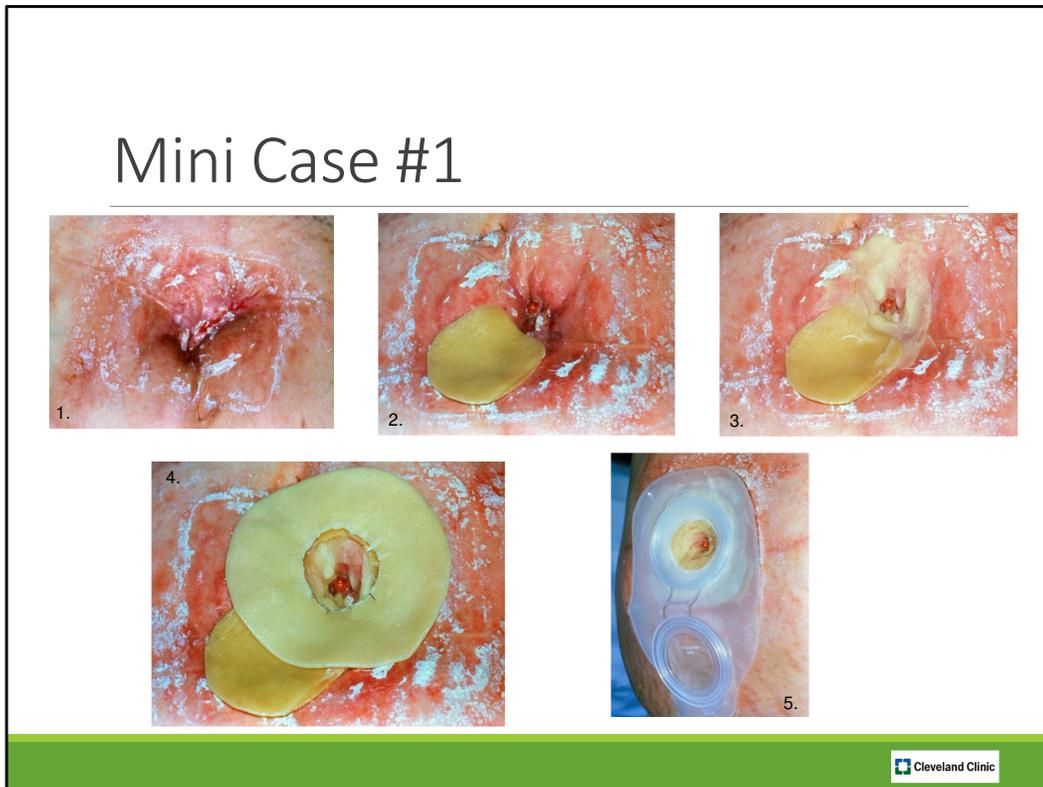


Applying Ostomy Care Concepts to Practice

R. B. Turnbull Jr. MD WOC Nursing Education Program

Mini Case #1



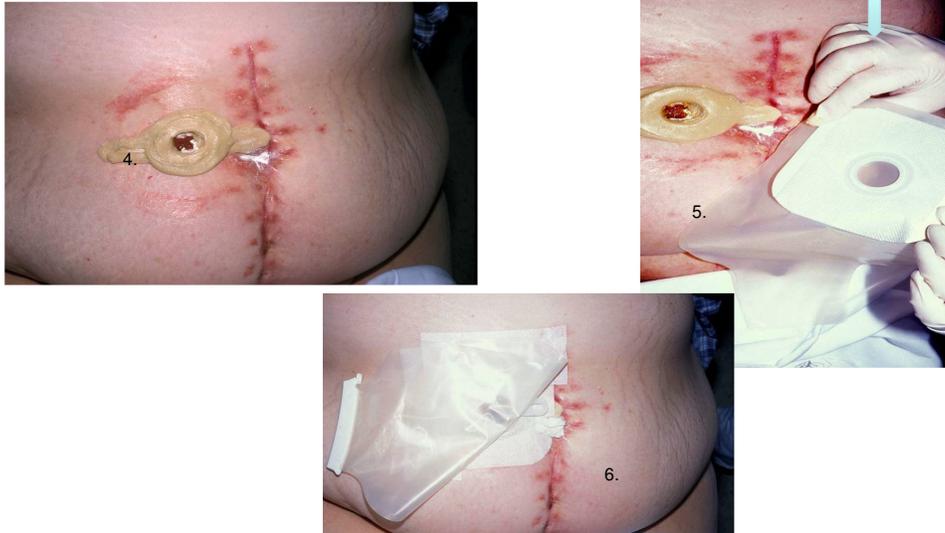
The fistula in this example is located at the bottom of this dimpled area. The white color is residual skin cement, which does not need to be removed in its entirety; it will come off with the next change. The dip area around this fistula is filled in with a skin barrier wedge, as is seen in picture two. A small caulking with skin barrier paste is followed by the use of a skin barrier washer, as seen in picture 4. Note the radial slits around the aperture; this allows the barrier to move a bit with changes in body contour which will keep the washer from lifting from the skin. One can see the pouch in place in picture 5; the aperture of the pouch is larger than the aperture of the washer, giving a tiered or layered effect. This helps to prevent the effluent from coming between the layers and undermining the pouch seal. In this instance, the WOC nurse went back in through the window of the pouch and applied skin barrier paste, with a light dusting of skin barrier powder, over the exposed skin to provide it with protection against the fistula output. One could also picture -frame the edges of the pouching system of added support.

Mini Case Study #2



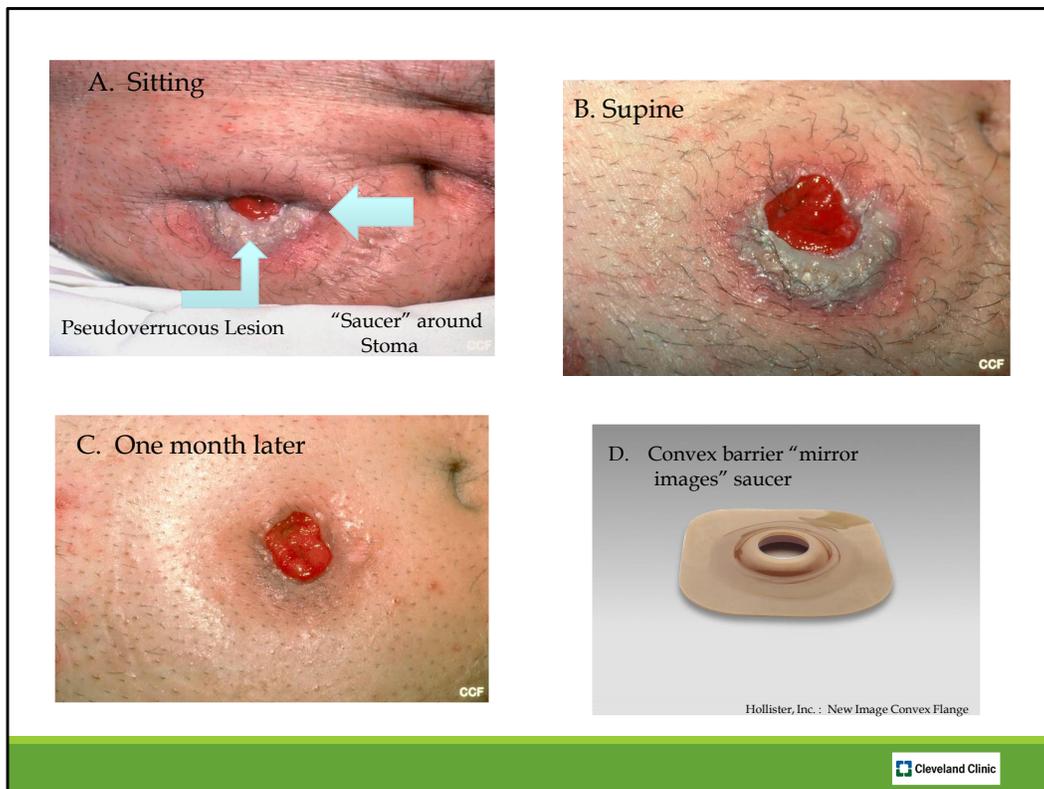
This woman has a loop ileostomy located above the umbilicus, near a body crease, with a very firm abdomen, and a retracted stoma. In viewing picture one on the left, an individual can easily see the degree of chemical irritant dermatitis that has occurred secondary to pouching difficulties. A variety of pouching systems were used before the illustrated system was found. She did require a bit of support around the peristomal area, but all integrated convexities, even the softest, buckled and leaked. In picture 2, one can see there are two depressions at 3 and 9 o'clock, and the stoma retracts further with sitting than when flat. The skin was dusted with skin barrier powder to dry the denuded tissue to improve adhesion of the adhesives in the pouching system. The dips at 3 and 9 o'clock were filled with thin wedges of solid skin barrier to begin to make a flat pouching surface. Note that the wedges are placed a little distance away from the stoma; this is to fill in yet not have undermining of the wedges.

Mini Case Study #2: Continued

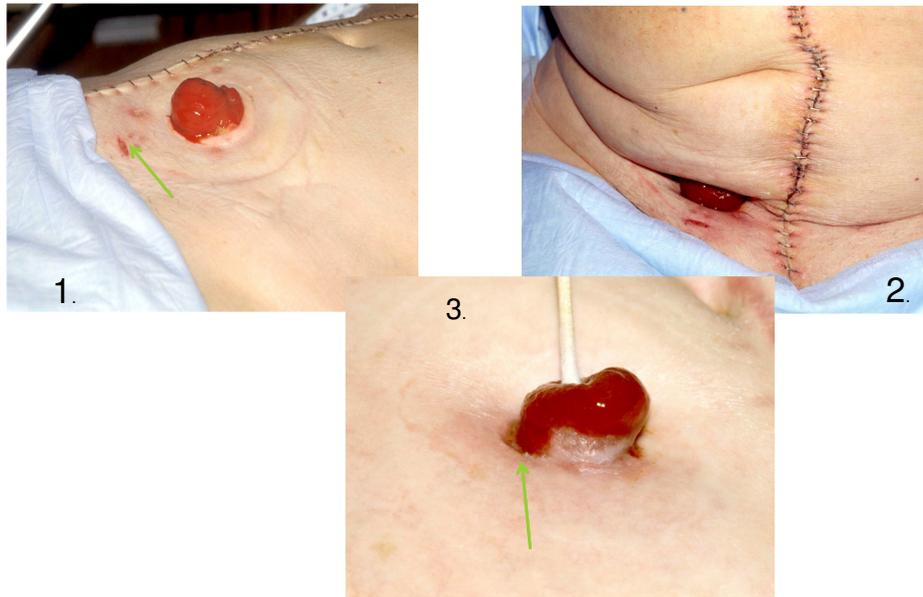


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In image 4, one can see a skin barrier washer was added for protection of the peristomal skin; the aperture was cut wider than the stoma size. The edges of the barrier wedges were caulked with skin barrier paste. A Hollister premium pouch had the karaya ring removed, which provides a flat pouching system that gives mild support to the tissues of the peristomal plane. Note the arrow in picture 5; usually when the washer is removed, the back of the junction of the tape collar and plastic ring receives a light caulk with skin barrier paste. This prevents the effluent from leaching under the tape collar. In picture 6, one can see the edge of the skin barrier wedge protruding from beneath the pouching system. This will be covered when the edges of the tape collar are picture-framed with added tape, half on the collar of the pouching system and half on the surrounding skin. A belt was also applied for added stability and support. A three-day wear time was obtained using this system.



Chemical irritant dermatitis also occurs with urinary stomas. Because urine has no enzymatic component, one does not see denuded tissue. The skin absorbs fluid and becomes hydrated leading to pseudoverrucous lesions. In layman's terms it is known as dishpan hands of the peristomal skin, a condition similar to what hands look like when exposed to water for an extended period. The skin becomes wart-like in appearance, soft, spongy, gray-white in color, and can be painful. Treatment is the same as noted for chemical irritant dermatitis with fecal stomas without the use of powder. Recommended for use with urinary stomas are pouching systems with extended wear barrier. These barriers swell when in contact with fluids so provide increased protection to the peristomal skin. The pictures in this slide show an individual with pseudoverrucous lesions around his stoma. Note the contour changes in the sitting and supine positions. Use of a pre-cut convex pouching system provided the appropriate match for this individual's contours. With urine no longer bathing the peristomal skin, the epidermis went on to heal within one month.



Mini Case Study #3

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This permanent end ileostomy is situated near the pubic crease. It is unknown why it was placed this low, but this provides an opportunity to reiterate the importance of communication between the physician and WOC nurse. It is imperative that the surgeons you work with know that the mark you make is meant to be at the center of the aperture; the skin that is removed should circle remove your mark. If the mark is used as the top of the skin circle, the stoma will not be in the correct place and problems such as seen here will, and do, occur. In picture one note the skin laceration that is a result of the edge of the pouching system digging into the tissues and cutting it. Picture two illustrates this more graphically. Also note the deep fold and downward tilt of the stoma in the sitting position. Multiple systems were tried without success. This individual had to have a stoma relocation. In addition to the peristomal laceration, note the trauma on the underside of the stoma as is seen in picture three. This is a result of the pouching system pushing into the mucosa with position changes. The patient was unaware of the trauma as he could not see the underside. The mucosa will never grow over this area of scar tissue. He is lucky he did not have a through and through laceration, which would have resulted in a fistula.

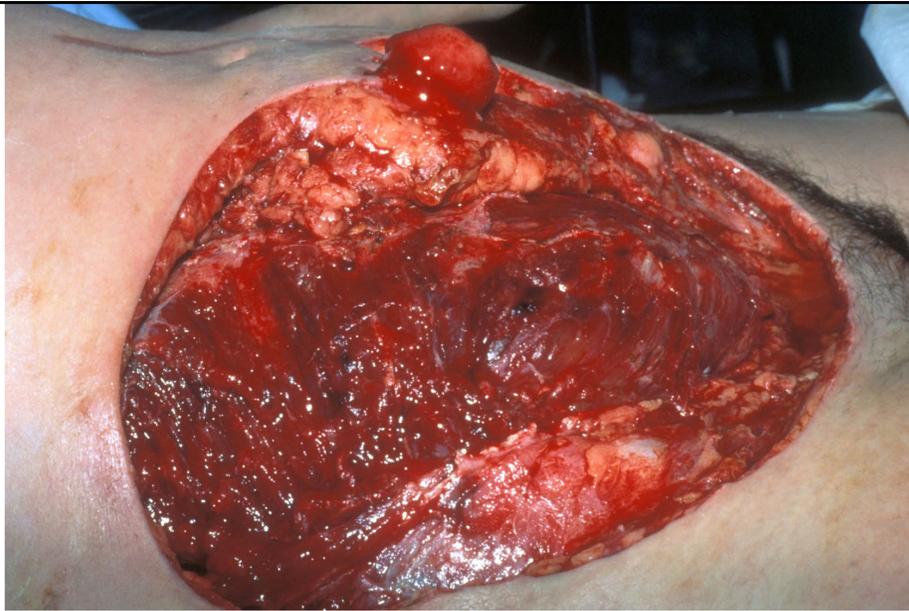


Mini Case Study #4

This individual has severe psoriasis around his urinary stoma which was placed on the left side secondary to radiation changes internally. One can see the silvery raised tissue. The area near the umbilicus is also affected; it is a light yellow-brown color. This is a result of fluid seepage, which dried and discolored the plaque. His dermatologist prescribed a variety of medications, which were in ointment form and required application three times a day. An adherent system would not have worked, so a non-adherent system was used. Nu-Hope company now has a non-adherent pouching system that can be ordered for this type of situation, making pouching less labor intensive and product consuming. The non-adherent system is in place; the pouch was placed over this gentleman's underwear to keep the pouch plastic off of the skin. However, one can make a non-adherent system while waiting for an ordered non-adherent system to arrive, or as a non-adherent alternate choice.

In picture three, the component parts are shown: a pouching system (any system can be made non-adherent); a skin barrier that is non-sticky on one side; it needs to be entirely smooth and non-adherent; and two belts. Not pictured are the belt rings needed. This photo shows Hollister belt rings in use, but one can cannibalize any pouching system that uses a belt to claim a "belt ring". The stoma aperture is cut to the appropriate size in the skin barrier. The release papers are removed and the adherent side of the barrier is attached to the adherent side of the pouching system. After the pouches release papers are removed, of course. This makes the system non-adherent. The end product is seen in picture four. The belt rings are then placed over the pouch and rest above the skin barrier, as viewed in picture five. Ideally, the belt tabs are located at the 2, 4, 8, and 10 o'clock positions. As one can see in picture five, two belts are then secured to the pouching system:

one from 2 and 10 o'clock, the second from 4 and 8 o'clock. The belts are applied a bit more tightly than usual as they are the only things holding the pouching system in place. Care must be taken not to make them too tight in order to prevent pressure or laceration injuries from the belts. Taping of the belts in position can help to keep the belts in place and prevent shifting of the system.



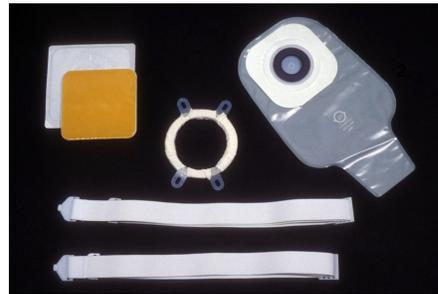
Mini Case Study #5

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This woman originally had a subtotal colectomy and end ileostomy created for Crohn's disease. An unexpected finding was cancer. As a result, a course of chemotherapy using 5-FU and levamisole was given. She called the physician's office on the Friday of a holiday weekend complaining of "skin irritation". An appointment was made for Monday. When she arrived at the office, the skin under the stoma was dimples purple, firm, and warm to the touch. She also was displaying a small amount of mental confusion. She was admitted urgently into the hospital, IV antibiotics were initiated, and the area surgically debrided as soon as an operating room became available. This is the result of that debridement. One can see the muscles of the abdominal wall.

NPWT was not available at the time. Also, it may not always be appropriate for all of your patients particularly those with bleeding disorders. The following illustrates how this wound can be managed and effective pouching obtained through the use of a non-adherent pouching system.

Mini Case Study #5: One Solution



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The wound was covered with normal saline moistened gauze and a layer of dry gauze was placed immediately around the stoma. A non-adherent pouching system was assembled and placed around the stoma. She was taken to the operating room for serial debridement until the wound was clean. The physicians requested an indwelling catheter, inflated with five milliliters of fluid, was placed into the stoma and held in position with a catheter holder. This system throughout her hospital stay, which included coverage of the defect after a week with a split thickness skin graft. She was sent to an extended care facility upon discharge from the acute care hospital using the non-adherent system over the graft, the indwelling catheter, and antibiotic therapy.

Mini Case Study #5: The Saga Continues . . .



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She returned on the weekend less than a week after discharge secondary to inability to maintain a pouch seal. Upon inspection, superficial slough was noted over the majority of the stoma along with a fistula seen at the base of the stoma. There was a dip along the edges of the graft, making about a quarter of inch drop. This area was filled in with a karaya washer, which is non-adherent so would not hurt the fresh graft, then the area was lightly caulked with a skin barrier paste. Adaptic, a gauze dressing that is impregnated with Aquafor ointment, was applied over the graft next to the karaya washer. A dry dressing was placed on top of the adaptic, and a soft, flexible adherent pouching system was applied over the barrier. All edges of the pouching system were taped in place. The patient had a local stoma revision and the same system was used until the plastic's service gave the go-ahead to use an adhesive system over the grafted area.

Mini Case Study #5: Continued

One year after her surgeries:

- Uses a one piece flat pouching system with skin barrier paste.
- Returned back to work without difficulties.



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One can see the excellent healing that occurred. The patient is now using a one-piece, pre-cut, opaque pouching system with skin barrier ring without any difficulty. The occasional skin irritation is treated with skin barrier powder.