

*Journal of*  
**WOCN**

*Wound, Ostomy and Continence  
Nursing*

**Volume 25 Number 5**

**September 1998**

**Marketing Innovations to Nurses, Part 2: Marketing's Role in the Adoption of Innovations**

Barbara J. Landrum

**A Quantitative Analysis of Pressure and Shear in the Effectiveness of Support Surfaces**

Rick Fontaine, Susan Risley, and Robin Castellino

**Impact of a Decision Tree on Chronic Wound Care**

Shaunne Letourneau and Louise Jensen

**Pathophysiology and Management of Venous Ulcers**

Dianne M. Rudolph

**Inhibition of Moisture Penetration to the Skin by a Novel Incontinence Barrier Product**

Joe Vinson and John Proch

**Patient with a Recessed, Stenosed Stoma Located in an Irregular, Pendulous Abdomen and the Presence of Pseudoverrucous Lesions**

Vicki P. Wagner and Sharon B. Osgood

**WOCN Fact Sheet  
See page 22A**

**Official Publication of the Wound, Ostomy and Continence Nurses Society  
An Association of ET Nurses**

 **Mosby**

ISSN 1071-5754

**FEATURE EDITOR: Maureen Hanlon, RN, MN, CETN**

Options in Practice presents different management approaches to the same clinical situation. You are invited to submit a brief case description, including the specialty nursing care provided, and several glossy, color photographs of the clinical situation. The case material will then be sent to another wound, ostomy, or continence care nurse, who will also address management concerns. Alternative solutions to difficult wound, ostomy, or incontinence clinical situations will be published.

## **PATIENT WITH A RECESSED, STENOSED STOMA LOCATED IN AN IRREGULAR, PENDULOUS ABDOMEN AND THE PRESENCE OF PSEDOVERRUCOUS LESIONS**

A 64-year-old woman was diagnosed as having colon cancer 9 years ago. At that time, a Hartman's pouch was created, and an end colostomy constructed. The patient weighed 254 pounds, and her maximum abdominal girth was 70 inches. She had a large, pendulous abdomen that significantly altered its contour with position changes. Her stoma was completely recessed in deep skin folds and was not visible when she was seated. The stoma was stenosed, and it was difficult to advance the little finger past the distal phalanx. Nonetheless, the colostomy functioned well, producing soft, formed stool several times per day. The patient's stoma was located in the lower left quadrant (LLQ) and was visible within a skin depression and on the inferior aspect of her pendulous abdomen when she was standing (Figure 1). Unfortunately, she was unable to visualize the stoma and self-care was difficult. The patient reported that her surgeon had advised that he had no choice but to construct the stoma in this area, and he further stated that she would not be a candidate for stomal revision.

The patient pouched her colostomy



**Figure 1.** Patient's colostomy difficult to pouch secondary to location within irregular skin depression in large, pendulous abdomen.

with a 2-piece ConvaTec Surfit (Princeton, N.J.) appliance with a 2¾-inch flange. Most of the pectin portion of the wafer was cut from inside the flange in order to place the wafer on a flat skin surface outside the skin depression. Two and one half inches of skin inside the flange was constantly exposed to stool, and painful, bleeding pseudoverrucous lesions developed (Figure 2). Because the pouch rubbed against her leg, the patient reused closed-end pouches for greater comfort. This pouching system required changing 1 to 3 times per day for a period of approximately 9 years. The patient had no one to assist her with colostomy care.

This patient also had very limited economic resources. She had received supply coverage from both Medicare Part B and Medicaid disability. Ultimately, however, she was judged no longer eligible to receive reimbursement for the large quantity of supplies required for pouching changes 1 to 3 times per day, and her physician referred her to the Visiting Nurses Association (VNA) for assistance with pouching and management of her pseudoverrucous lesions. The ET nurse was subsequently consulted.

**Vicki P. Wagner, RN, BSN, CETN:** The patient was willing to try new colostomy pouching systems in an effort to decrease the frequency of appliance changes and to heal the pseudoverrucous lesions. However, she did have several special requests: she believed she could only empty a 2-piece system; she wanted to

*Vicki P. Wagner, RN, BSN, CETN, is an Enterostomal Therapy Nurse with the Visiting Nurses Association of Western Pennsylvania, Butler, Penn.*

*Sharon B. Osgood, RN, BSN, CETN, is a Clinical Manager, Specialty Home Care Nursing, with American Home Care Services, Inc., Peabody, Mass.*

*Reprint requests: Vicki P. Wagner, RN, 154 Hindman Rd, Butler, PA 16001.*

*J WOCN 1998;25:261-6.*

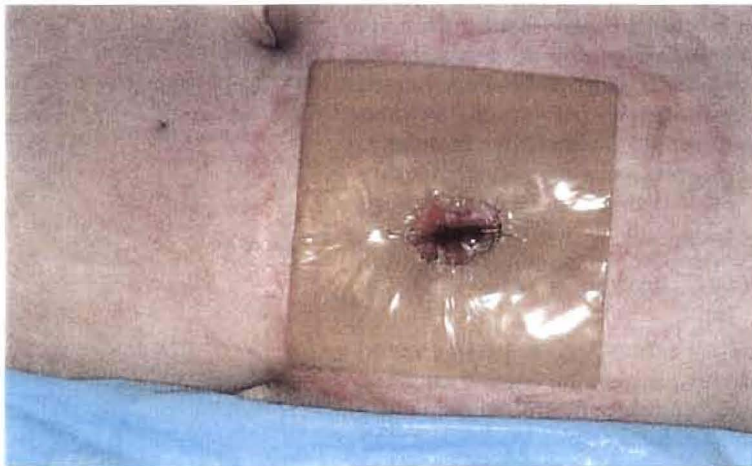
*Copyright © 1998 by the Wound, Ostomy and Continence Nurses Society.*

*1071-5754/98/\$5.00 + 0*





**Figure 2.** Pseudoverrucous lesions with superficial denuded areas on peristomal skin. Stoma located within slit-like opening and not visible.



**Figure 3.** Flexible 4 x 4-inch skin barrier sheet applied around stomal opening located in irregular skin depression.

continue with a closed-end pouch; and she stated that all supplies had to be reimbursable because of her limited financial resources.

Initially, I applied a Hollister Premium Skin Barrier Sheet (Libertyville, Ill.) to the peristomal skin. It was cut with a much smaller opening, compared with the previous opening, to offer better protection to the peristomal skin (Figure 3). Before the sheet was applied, a skin barrier film (Skin Prep Wipes; Smith and Nephew United, Inc., Largo, Fla.) was used on the peristomal skin to afford extra protection. A ribbon of Hollister Premium Paste was used around the opening of the adhesive side of the Hollister Premium Skin Barrier Sheet to provide a better seal. The patient's previous pouching system (ConvaTec

SurFit 2-piece 2 $\frac{3}{4}$ -inch appliance) was then placed on top of the barrier sheet (Figure 4). With this system, the wear time was increased to 1 to 3 days, and home health nurse or ET visits were made 3 times each week.

When this system leaked between nursing visits, the patient found herself unable to apply the skin barrier sheet, and she reverted to her previous pouching system. Despite her limited ability to perform self-care, she was able to apply topical treatments to the exposed peristomal skin inside the wafer. She tried several products to determine their effect on the peristomal pseudoverrucous lesions. Phillip's Milk of Magnesia (Bayer Corp, Gulfport, Miss.) and Baza Antifungal Cream (Sween Corp, N. Mankato, Minn.) were applied in an attempt to protect the skin from the stool, thereby aiding healing. Transient resolution of the lesions was obtained with application of each product; however, they did not completely resolve. Calmoseptine ointment (Huntington Beach, Calif.) was then applied, which resulted in effective healing (Figure 5). The Calmoseptine ointment provided an effective moisture barrier and protected the skin from stool drainage and recurrence of the pseudoverrucous lesions.

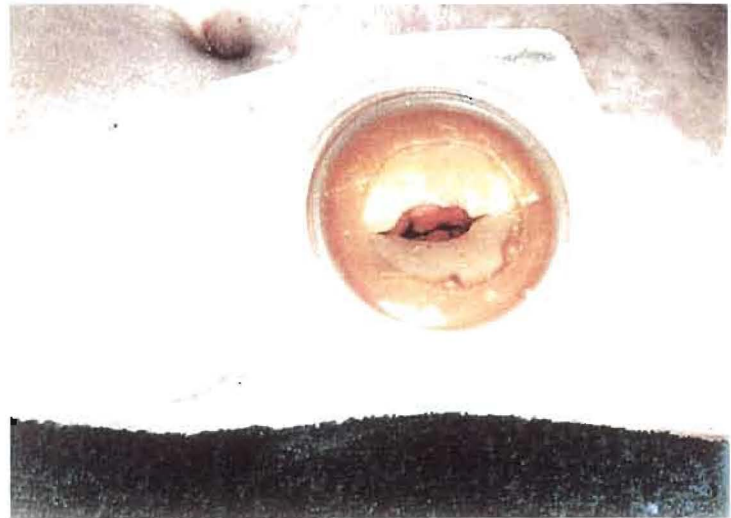
Because of these experiences, it was evident that a different pouching system was needed. A Torbot custom faceplate (Warwick, R.I.) was made to fit the irregular skin depression surface. Torbot supplied a plastic base faceplate and modeling clay (Figure 6). The clay was applied to the base of the faceplate until a buildup matching the contours of the patient's peristomal skin was achieved. This clay mold was sent back to the company, and a hard, plastic faceplate with a flange that would accommodate a ConvaTec pouch was made from the model. Technical support was supplied by Torbot's ET nurse and technician throughout the process. A Torbot 5-inch double-sided adhesive seal was used to attach the faceplate to the patient, but a seal was not obtained. Subsequently, a Nu-Hope Moldable Barrier No. 54 (Pacoima, Calif.) was placed on the skin side of the faceplate; the faceplate was then applied to the patient, and a seal was obtained. A custom-made 6-inch Nu-Hope ostomy belt was used to hold the faceplate in place (Figure 7). Technical support was supplied by Nu-Hope to ensure a properly fitting belt. The patient believed she did not have the strength to

manipulate the belt, however, and other methods to secure the faceplate were sought. After significant trial and error, a pouching system was designed that provided effective containment for 2 to 3 days.

The system comprised a Nu-Hope Moldable Skin Barrier No. 54 applied to the skin side of the Torbot custom faceplate (Figure 8). Nu-Hope extra-wide adhering tape strips were applied to secure the faceplate to the skin (Figure 9). I then cut a Hollister 8 × 8-inch skin barrier sheet to fit around the faceplate flange. The faceplate was secured with Nu-Hope extra-wide adhering tape strips (Figure 10). I also applied additional tape strips to the outer edge of the skin-barrier sheet (not shown) when needed. Approximately 25 tape strips were required. To protect the peristomal skin, Calmoseptine ointment was applied to any exposed surfaces. A ConvaTec closed-end pouch was then applied, and the appliance was changed 3 times per week and as necessary if stool leaked\* underneath the faceplate. This pouching system has proved effective for this obese patient with complex management requirements.

My original goal was to develop an effective pouching system that the patient could apply independently so that she could be discharged from VNA services. Several attempts were made to teach care of the system to the patient and to decrease the frequency of appliance changes. These attempts were unsuccessful, and the patient continues to have her ostomy appliance changed 3 times a week by the ET or primary care nurse.

Financial constraints have been an ongoing difficulty throughout the patient's care. Medicare Part A reimbursement for the Torbot faceplate was only \$3.00, even though the actual cost was \$95.00. Because the patient could not pay this expense, I obtained a \$75 voucher from the American Cancer Society to apply toward the cost. I ordered the faceplate through the VNA's Durable Medical Equipment (DME) company, and they absorbed the residual cost. The faceplate is reusable and will last indefinitely, so it will not have to be reordered. Because the patient also has Medicaid Disability Insurance, I was able to have the ostomy belt reimbursed as a pendulous abdomen belt for \$60. Nu-Hope agreed to supply the belt for this amount. Unfortunately, the patient was not able to manipulate the



**Figure 4.** SurFit Stomahesive wafer (ConvaTec, Princeton, N.J.) placed over skin barrier sheet.

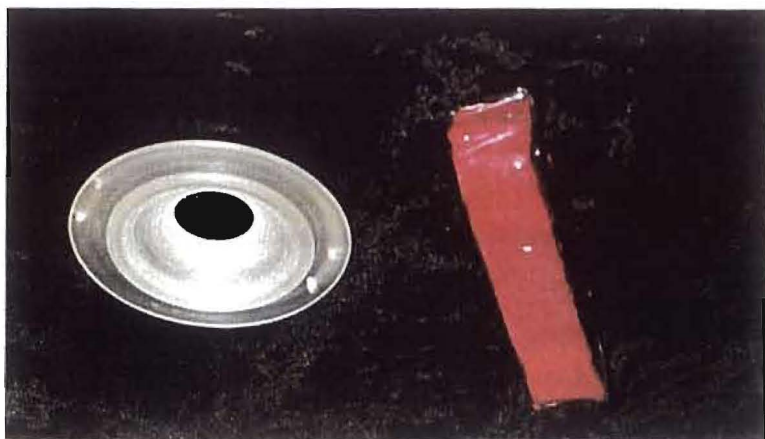


**Figure 5.** Significant healing of pseudoverrucous lesions evident after Calmoseptine ointment (Calmoseptine, Inc., Huntington Beach, Calif.) used to protect peristomal skin.

**Table 1.** Pouching system costs

Product	Cost (\$)
Nu-Hope Moldable Skin Barrier No. 54	7.00
8 × 8-inch Hollihesive Skin Barrier Sheet	25.00
Nu-Hope extra-wide adhering tape strips	3.00
Total	35.00
Estimated weekly cost (3 changes/wk)	105.00
Estimated monthly cost	420.00





**Figure 6.** Modeling clay and plastic base Torbot faceplate (Torbot Group, Warwick, R.I.) used to make mold for custom faceplate.



**Figure 7.** Torbot faceplate secured with Nu-Hope custom-made ostomy belt (Nu-Hope Laboratories, Inc., Pacoima, Calif.). Patient lacked sufficient dexterity to apply belt, so it was not used in final pouching procedure.

belt independently, and it was not used. All additional supplies were reimbursable as part of the home health visit under Medicare Part A.

The above-described colostomy appliance and treatment proved effective in healing the patient's pseudoverrucous nodules, but it was very expensive. A breakdown of the approximate cost for each appliance change is described in the Table. The total cost per appliance change was \$35; the cost per week was approximately \$105.00; and the monthly cost was \$420.00. If the patient were to try to obtain these supplies independently, she would be reimbursed under Medicare Part B guidelines, but for only a fraction of the cost. A DME company is required by state regulations to accept assignment on ostomy supplies for Medicaid recipients. There

would be significant expense for the DME company if it continued to provide supplies for this patient. Also, the patient's limited resources would not allow her to bear the additional financial burden.

In light of the patient's need for skilled nursing visits for colostomy appliance changes to prevent bleeding pseudoverrucous lesions, and her lack of funds for other avenues of assistance or for supplies, she continues in the care of the VNA. Medicare Part A coverage provides for this service.

**Sharon B. Osgood, RN, BSN, CETN.** As an ET nurse in the area of home care, I found it easy to identify with the complexity of this case, which involved both clinical and financial considerations.

At this point, based on resolution of the pseudoverrucous lesions that justified routine, skilled nursing visits, I believe that a discharge plan for the patient should be established. A case conference should include the patient, any available caregivers, a social worker, primary care nurse, and ET nurse. Community resources should be identified to assist the patient in continuing her management. Available resources include, but are not limited to, senior care agencies that provide for personal care or private nursing agencies. The patient should be informed that, although some of these services may be subsidized, some services will require private payment.

As ET nurses, we are all too familiar with reimbursement issues and their impact on the management and supplies required for patients with complex care needs. Our goal always is to find the least expensive management system that offers the best possible skin protection and containment. However, the financial obligations related to ostomy supplies must be addressed with patients, because they will ultimately remain accountable for portions of the cost. When these costs are overwhelming, we should assist patients to identify alternative funding sources. The American Cancer Society, as well as many of the vendors with whom we deal, often assist patients with documented needs related to ostomy management and supplies.

In this case, the ET nurse used creativity in designing an effective pouching system for this patient, especially in light of the constraints placed on the WOC nurse by the patient. I believe that the cost of the patient's current pouching system might be reduced by examining each item individu-



ally and by substituting or eliminating items one at a time so that the procedure becomes simpler and less expensive. The patient should be advised that, although she prefers a closed-end pouch, it is not reimbursed by Medicare (because there are no medical indications), and therefore she is expected to assume responsibility for its cost. This is a costly management system, and the home care agency should not have to assume this expense over a prolonged period of time simply because the patient is unwilling to try an open-ended pouch. The ET nurse's goal at this time should be to (1) increase wear time for the patient's appliance, (2) delete steps or items used at each pouch change, (3) substitute less costly and perhaps more effective products on a systematic basis.

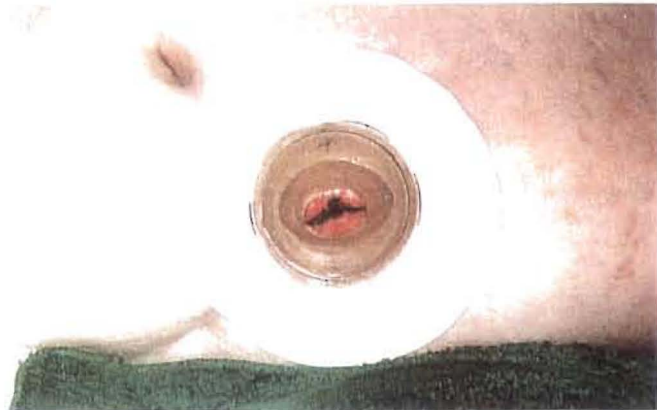
An area that could be simplified, with a subsequent decrease in the cost of the system, includes applying a 4 × 4-inch instead of an 8 × 8-inch skin barrier. I believe that experimenting with less expensive barriers or trying to eliminate them may be helpful. An Eakin Cohesive Seal (manufactured by Eakin, distributed by ConvaTec) might be beneficial. If the seal allows increased wear time, its more expensive initial cost would be offset. Eakin now has an HCPCS code for the seal, making reimbursement less of an issue for those who truly need this product. I have found that use of this product is simple, and that it can be applied with a gloved hand. The small washer can be stretched to fit around the stoma, and it creates an excellent barrier against leakage of stool or urine. The pouching system can then be applied in the usual manner. I even have had success with use of ½ of an Eakin Seal, stretching it around the stoma to get 2 applications from 1 washer. It also can be molded into a "bead" or "ring" that is equivalent to a bead of paste.

Skin bond cement may provide good contact between the appliance and the skin. A thin layer of "skin cement" can be applied to the peristomal skin, to the skin barrier, or to that portion of the pouching system that remains in contact with the skin. The cement must be dry before application of the pouching system. Removal of the appliance may require a solvent adhesive remover. Costs also may be reduced by decreasing the number of tape strips used during application or by trying a different method such as Nu-Hope pink tape strips. These can be ordered according to the size required.

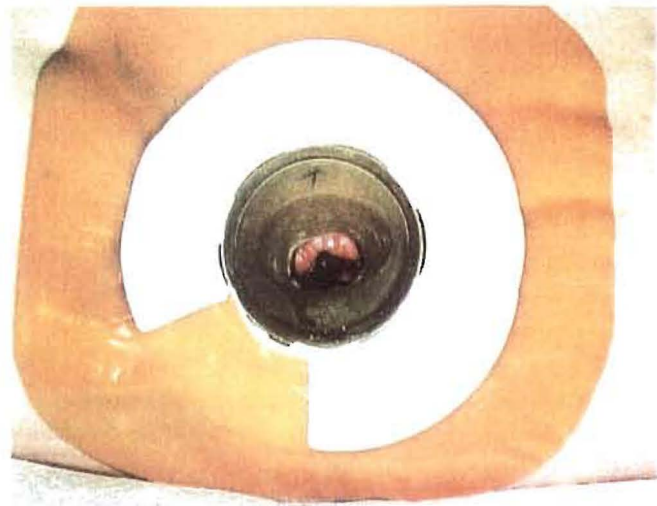
In addition to these options, a number



**Figure 8.** Torbot custom faceplate (second from left), covered with Nu-Hope Moldable Skin Barrier No. 54.



**Figure 9.** Nu-Hope adhering tape strips used to secure Torbot faceplate to site.



**Figure 10.** Hollister Skin Barrier Sheet (Libertyville, Ill.) cut to clear faceplate flange, partially secured with tape strips. ConvaTec (Princeton, N.J.) closed-end pouch snaps on to flange on faceplate.

of permanent faceplates and molds can be poured and made in the patient's home. Both Torbot and Nu-Hope have mold kits designed for use in the home care setting. One is a clay-type mold, and the other is an alginate-derived mold. They may be difficult to use, so a request for 2 kits is recommended. The WOC nurses must work quickly because the molds set up fast. Two sets of hands may be needed, especially if it necessary to stretch the patient's abdominal surface flat. Nonetheless, a mold enables the WOC nurse to obtain a customized pouching system. We recently completed this procedure for one of our home care patients. An alginate mold was created, and Nu-Hope used it to design a 1-piece, disposable, odor-proof

pouch for a patient who required deep convexity secondary to a large, pendulous abdomen and a deeply retracted stoma. Wear time went from daily changes caused by constant, chronic leakage to twice weekly pouch changes. Leakage is now a rare occurrence for this patient. A customized faceplate can then be applied, and a skin barrier using Skin Bond Cement (Smith and Nephew United, Inc.) created.

Despite the surgeon's advice that stoma revision was not feasible, I recommend considering a second surgical opinion. A stoma located on the superior aspect of the patient's abdomen could be expected to make a tremendous difference in her ability to visualize and care for her stoma, thus achieving independence.