The Shape of Things to Come: An Alternative to Cut-to-Fit Barriers

Overview

The skin barrier is the most important part of any pouching system. An incorrect fit compromises skin integrity and security. The WOC Nurse can use relevant clinical experience, research, technology advances, and products to individualize patient care.

Statement of Problem

Cut-to-fit skin barriers are routinely used in hospitals early in the postoperative period to minimize inventory and to manage stomas that are changing in shape and size. These products also provide benefits for patients who have stomas which are not round. Although cut-to-fit skin barriers can provide a customized opening, some patients or nursing staff are unable to accurately cut the skin barrier to ensure a proper fit.

Current products available as an alternative to cut-to-fit skin barriers (such as the ConvaTec® SUR-FIT Natura® Moldable Skin Barriers) do not address all the needs for different stoma types and clinical applications. Varying starter hole sizes sometimes cause a problem in customizing the opening to protect all of the peristomal skin. This can lead to skin irritation. The limited ability to enlarge the starter hole may also create the need to stock additional inventory. The lack of an integrated floating flange may make the current two-piece skin barrier offering less flexible and require additional pressure to attach the pouch to the skin barrier postoperatively.

Methods

Over 80 community patients with different stoma types evaluated a new skin barrier that did not require a scissors to cut to the correct shape. The majority found the skin barrier secure, easy to shape, comfortable, and it decreased their skin barrier changing time. The results from this study led to an expanded evaluation, and an examination of the value of a shape-to-fit skin barrier from the standpoint of the clinician.

Subsequently, WOC Nurses from five acute care sites evaluated the FormaFlex Shape-to-Fit Skin Barrier, which is part of the New Image Two-Piece Pouching System (Figure 1). They each utilized the shape-to-fit skin barrier on 10–20 patients over several months. Information was recorded using a standardized evaluation method (Figure 2).

They applied the skin barrier postoperatively when the stoma size and abdomen were still changing. The skin barrier was used with all ostomy types and accessories were used in accordance with normal protocols for their facilities.
Case Studies

The skin barrier was determined to be easy to shape, flexible to skin folds, and able to provide acceptable wear time. All clinicians found target populations within their settings where this skin barrier provided enhanced value for the patient. Additionally, each clinician felt this product would be a viable option for some of their patients after discharge. The following case studies illustrate some of these findings:

**Case Study 1: Patient with Obstructing Metastatic Colon Cancer and Diverting End Ileostomy**

- Conformed well to the edematous postoperative abdomen (Photo 1)
- Flexible with the integrated floating flange
- Provided a customized fit (Photo 2)
- The skin barrier hydrated well and protected the peristomal skin (Photo 3)

**Case Study 2: Patient with Ruptured Abdominal Aortic Aneurysm with Compartment Syndrome and Diverting Colostomy**

- Stoma flush, but the skin barrier conformed well and provided excellent wear time (Photo 1)
- Staff very satisfied
- The skin barrier was easy to shape to unusual stoma contours to protect the peristomal skin
- Removal from the skin was easy (Photo 2)
Case Study 3: Patient with Open Midline Incision to Negative Pressure Wound Therapy with Necrotic End Colostomy Due to Perforated Diverticulitis

- Conformed well to a large abdomen (Photos 1 and 2)
- Integrated floating flange provided needed flexibility and allowed for easy and comfortable removal of the pouch to assess the stoma
- Achieved a three day wear time with no need for additional products or accessories

Case Study 4: 77-Year-Old Patient with Crohn’s Disease and Ileostomy Revision

- Opening was easily customized to the base of the stoma with irregular shape (Photos 1–3)
- Skin barrier was flexible and easy to shape
- Easy to teach an elderly patient to use
- Pouch was easy to attach without discomfort due to the integrated floating flange (Photo 4)
**Case Study 5: Patient with Abdominoperineal Resection for Recurrent Cancer**

- Easier to customize opening compared to a cut-to-fit skin barrier
- Effective seal with a flush stoma (Photos 1 and 2)
- Easy to teach the patient to use
- Conformed well to post-op abdomen

**Conclusion**

Cutting skin barriers can be difficult, inaccurate, and in some cases may negatively impact outcomes for people with ostomies. The data and photos from these clinical cases support a new shape-to-fit skin barrier which offers an effective alternative to scissors for nurses and patients. This technology provides skin protection, the ability to create a customized opening, and security for people with different ostomy types. In addition, the consistent starter hole size, and ability to easily stretch the FormaFlex Shape-to-Fit Skin Barrier can help minimize inventory needed in an acute care setting.

Additional anecdotal comments provided by the WOC Nurses who evaluated the product are provided in Table 1.

**Table 1: Clinician Comments Regarding the FormaFlex Shape-to-Fit Skin Barrier**

- “Remarkably flexible!”
- *This product is a “patient pleaser.”*
- “Impressive.”
- “The more I used it, the more I liked it.”
- The skin barrier was “gentle but strong.”
- A “winner for home health and floor nurses.”
- Very “user friendly.”
- The skin barrier “performed really well.”
- “Easy to use. Easy to teach.”

**As presented in part at**

**2011 WOCN Conference**

June 4-8, 2011
New Orleans, LA