

# Combining Fit & Formulation to Manage Irritated Peristomal Skin

## Case Study

### Abstract:

One crucial goal of the Stomal Therapy Nurse is to help ensure that each patient regains his or her quality of life after surgery. No patient is the same and as such, the evaluation of pouching systems and products to meet an individual's specific needs is imperative in achieving this goal. Skin problems from various reasons, can be a constant issue occurring throughout a patient's lifetime leading to constant skin irritation, pain, itching, leading to skin barriers not adhering, resulting in further leakages. The literature reports that up to seventy-six per cent of stoma patients will experience peristomal skin irritation.<sup>1</sup> This vicious cycle of leakage, skin issues, and associated patient distress are challenging for the clinician but more importantly, for the patient as it impacts their skin health.

The following case study discusses one such patient and her experience with finding a suitable pouching system for her that relies on the mix of fit and formulation in achieving her goals of attaining skin health.

### Background & Relevant Medical History:

Mrs. Q (initial changed to protect privacy) was a seventy-nine year old female with an extensive previous medical and surgical history. She presented with symptomatic sigmoid diverticular disease and an acute chronic inflammation. Surgical intervention was required and Mrs. Q underwent a high anterior resection and formation of a loop ileostomy. She recovered well after surgery with minimal challenges other than some malnutrition. However, she did suffer from mild depression after surgery, which influenced her ability for self-care. Fortunately, her husband was involved in assisting her with her care in the majority.

### Challenges:

However, she developed a parastomal hernia approximately four weeks after surgery. Prior to developing this hernia, she had not experienced issues with her pouching system. Mrs. Q was quite distressed regarding her pouch dislodging regularly and without warning. The unusual shape of the parastomal hernia and subsequent skin topography appeared to contribute to this.

Her skin was denuded, with some associated peristomal moisture associated skin damage (PMASD) that affected satisfactory adherence of the skin barrier. (See Figure 1) She was experiencing pain coupled with a constant irritation she described as a constant itch. When ongoing, this itch can be difficult to treat and have even more impact on the individual.<sup>2</sup>

### Clinical Management Objectives:

Regarding fit, a pouching system was necessary that would move and flex with the body, fit well over the parastomal hernia, not pop off, and ensure extended-wear and comfort. A soft convexity one-piece product was identified as being the most suitable in relation to fit as this could help with addressing many of the topographical challenges.

In terms of formulation, a skin barrier was needed that could provide a feeling of security and comfort, protect the skin's natural moisture balance, and hopefully address her persistent itch. During a recent double-blinded, randomised controlled trial (RCT) of a ceramide-infused skin barrier (CeraPlus Skin Barrier with Remois Technology\*) vs. a non-ceramide infused skin barrier, it was reported by patients in the treatment group during this trial, that they were 'very satisfied' with itching prevention.<sup>3</sup>

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**Figure 1** Parastomal Hernia with abdominal bulge (developed 4 weeks post-operatively) and PMASD



**Figure 2** CeraPlus soft convex one-piece pouching system with integrated adhesive border – applied four weeks post-operatively

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Ceramide is a natural component of human skin that helps to decrease transepidermal water loss (TEWL) from damaged or eroded skin.<sup>4</sup> Putting evidence into practice, it was decided to utilise the CeraPlus skin barrier with Remois Technology for this patient.

Lastly, another consideration was the border of integrated adhesive. This helped with the overall flexibility, minimised the need for the clinician to add accessories such as extenders, as well helped to engender a feeling of security, which was expressed by Mrs. Q.

### Outcomes:

As noted by the pictures of the progress made once Hollister CeraPlus soft convexity pouch was introduced the peristomal skin visually improved within days. (See Figures 2 & 3) The pouch was flexible, moved well with her body shape, sat well over the parastomal hernia and remained well adhered.

With the CeraPlus soft convexity pouch remaining insitu, this ensured that the peristomal skin progressed well and continued to visually improve within a matter of days. (See Figure 4) The patient and her husband were calmer and no longer distressed. The patient reported that her peristomal skin caused no irritation, itchiness, or pain. The patient once again was able to go out in comfort, attend church and all activities that she had been missing for fear of the pouch falling off.

### Conclusion:

Maintaining peristomal skin health is a key challenge for the clinician and the person living with a stoma. The impact of peristomal skin conditions can sometimes create profound impacts on a person's quality of life.<sup>5</sup> Identifying the correct fit from a pouching system goes a long way in ensuring positive outcomes. However, this is not the stand alone factor when considering a pouching system for a patient. During one's clinical decision-making, using evidence to identify and select products regarding formulation in maintaining skin health, is an aspect some clinicians possibly overlook concerning peristomal skin health. This is another important aspect for consideration in maintaining skin health.



**Figure 3** Peristomal skin condition improvement within days after pouching system applied.



**Figure 4** Peristomal skin condition appears to visually improve and itching improved as reported by the patient after 2 weeks.

### References

1. Richbourg L, Thorpe J, Rapp C. Difficulties Experienced by the Ostomate After Hospital Discharge. *J Wound Ostomy Continence Nurs.* 2007; 34(1): 70-79
2. Bautista, D.M., Wilson, S.R., Hoon, M.A. (2014). Why we scratch an itch: The molecules, cells and circuits of itch. *Nat. Neurosci* 17(2): 175-182.
3. Colwell J, Pittman J, Raizman R, Salvadalena G, A Randomized Controlled Trial Determining Variances in Ostomy Skin Conditions (ADVOCATE), *J Wound Ostomy Continence Nurs.* 2018;45(1):37-42.
4. McPhail, J 2015, 'The role of ceramide in skin function and the understanding of its role in minimising transepidermal water loss (TEWL) in peristomal skin', *ASCN UK Poster Presentation*, <http://ascnuk.com/wp-content/uploads/2015/12/P-26.pdf> Accessed October 2019.
5. Nichols TR. Quality of life in US residents with ostomies assessed via the SF36v2: Role-physical, bodily pain, and general health domain. *J Wound Ostomy Continence Nurs.* 2016; 43(3):280-287.



\*Remois is a technology of Alcare Co., Ltd.

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