

Improving Skin Health & Enhancing Quality of Life for a Patient with High Output

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Abstract

Peristomal skin complications (PSCs) have been shown to impact the Quality of Life (QOL) of the person with an ostomy.¹ Coupling PSCs with other stomal challenges, such as high output, and other comorbidities, could be potentially overwhelming for any individual to experience.² If the Stomal Therapy Nurse (STN) is able to view the person more holistically rather than solely focusing on the stoma, this may afford significant support during challenging times after ostomy surgery.³ This case reviews the multiple challenges one woman is facing when managing her stoma and how positively impacting PSCs can make a difference.

Patient Background, Medical & Surgical History

Mrs. M (initial changed to protect privacy), is an elderly widow who emigrated to Australia soon after meeting her husband. Her parents died in the second world war when she was only a child. However, she has two supportive children and multiple grandchildren and lives with her elderly sister who helps in managing her care.

Mrs. M has an extensive medical and surgical history. This includes osteoporosis, osteoarthritis, oesophageal reflux, chronic obstructive pulmonary disease, hypertension, hypercholesterolaemia, bilateral total hip replacements, bladder surgery, and iron deficiency anaemia. Additionally, her stature is quite 'stooped', and as such requires her to mobilise with the assistance of a four-wheeled walker.

Mrs. M was admitted to hospital in late 2018 with abdominal pain after collapsing at home. She was found to have a necrotic large bowel, requiring a subtotal colectomy and a terminal ileostomy. This surgery was performed days later in early 2019. However, it resulted in extensive intestinal loss leaving approximately only 60-80cm of her ileum. Her hospital admission was also complicated by a urinary tract infection and associated delirium.⁴ As such, Mrs. M required a protracted hospital admission, including one admission to the intensive care unit. Subsequent to this she underwent an additional lengthy stay on a long-term rehabilitation unit.

This lengthy hospitalisation resulted in weight loss, weakness and overall physical deconditioning.⁵ The term 'hospital-acquired deconditioning' (HAD) has been demonstrated with older adults in post-acute settings who have higher readmission rates and lower rates of discharge back to the community.⁵ Fortunately despite her lengthy admission, she was eventually discharged with a fully-integrated community nursing follow up in March 2019, where she was also reviewed by her STN regularly.

Challenges

Mrs. M had 'short bowel syndrome' which led to very liquid output (often with little to no form), which created challenges in maintaining skin barrier adhesion for a secure skin seal. Any error in positioning of the pouching system resulted in leakage. She needed a skin barrier with fast and secure adhesion that could also manage the high volumes of caustic stomal effluent rich in digestive enzymes. Short bowel syndrome has also been linked to impacting QOL as it can cause severe hydration and nutritional issues.⁶ As such, this condition should be managed from a multi-disciplinary team approach to ensure the patient is viewed more holistically.^{3,7}

As described earlier, she was an extremely small-statured woman with minimal skin surface area on her torso in which to secure a skin barrier. Additionally, the use of the four-wheeled walker and her 'stooped' stature, made positioning any skin barrier even more challenging due to the deformation of her peristomal topography.

Lastly, she was extremely deconditioned following lengthy hospitalisation.⁵ Her nutrition was poor necessitating dietitian review. She was generally very frail overall with limited ability for self-care. At first it was assumed that she was unlikely to gain independence with her stoma care due to challenging placement of the skin barrier.

Management

Her initial pouching system on discharge comprised the following: Coloplast Brava Mouldable Ring, Dansac Nova 2 Wafer (cut-to-fit, flat), Dansac Nova 2 FoldUp Maxi pouch, Coloplast Brava Elastic Tape & a Dansac ostomy belt. However, Mrs. M suffered frequent pouching system dislodgement from high output that was on occasions quite 'explosive'. The rings while staying intact, did not appear to absorb much moisture from the stomal output when the pouching system was removed. Her peristomal skin was denuded and painful with moist areas extending beyond the immediate perimeter, where effluent had undermined the rings and the skin barrier. (See Figure 1).

The two-piece was originally selected for her for ease of use as she could leave the skin barrier in place if needed and only change the pouch. However, the coupling flanges were not ideal for her, as the angles on her abdomen created by her stoop meant that this was less flexible than desired. The ostomy belt was also difficult to place correctly as well as remain in the correct position. A full pouching system review was necessary.

It was decided to use a one-piece system to reduce the system rigidity from the two-piece flange and create an overall more flexible pouching system for her. Her system was altered to a Dansac TRE Seal (18mm) and a Dansac NovaLife 1 TRE soft convex barrier (25mm pre-cut). (See Figure 2). This seal was applied to her skin first, leaving minimal gaps where possible. Any exposed skin surface was then dusted with stoma powder to absorb excess moisture. Changing from cut-to-fit to pre-cut skin barrier helped eliminate challenges with cutting while simplifying the process for her. The Dansac TRE technology was chosen to address the concerns of skin damage from digestive enzymes, pH management, quick and secure adhesion from high initial tack, and the requirement for fluid absorption from her high output stoma. This system worked well and was secure. Education was provided to caregivers for application and instructions were left for other community nurses to follow. Within only twenty-four hours, her skin had visibly improved and Mrs. M expressed greater comfort. (See Figure 3).

Conclusion

Understanding that peristomal skin complications can play a profound impact on a person's quality of life is a crucial concept. Managing PSCs is an important role of the ostomy specialist nurse in correcting these issues when they arise. When a patient is viewed more holistically, it quickly becomes evident that they may have conditions that also impact their QOL that may need factoring in their overall treatment plan and clinical approach. This should give clinicians pause when focusing just on the 'hole' and not the 'whole'.³



Figure 1: Visibly damaged skin from faecal leakage



Figure 2: The revised pouching system.

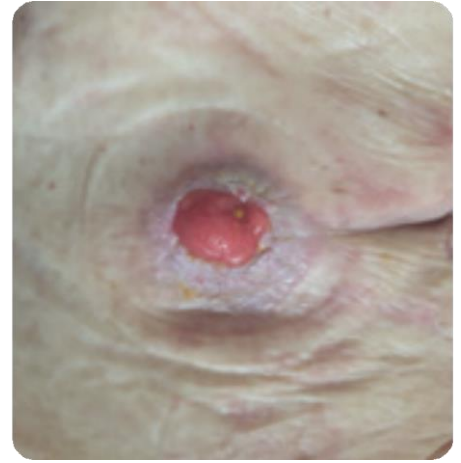


Figure 3: 24 hours post-application of Dansac NovaLife TRE soft convex barrier.

References:

1. Nichols TR & Inglese, GW 2018, 'The burden of peristomal skin complications on an ostomy population as assessed by health utility and the physical component summary of the sf-36v2®', *Value Health*, vol. 21, no.1, pp. 89–94.
2. Sushma Jain, MPH 2007, 'Comorbidities play a larger role in predicting health-related quality of life compared to having an ostomy', *The American Journal of Surgery*, vol. 194, no. 6, pp. 774-779.
3. Carville, K 2003 'The evolution and experience of stomal therapy nurses in Australia 1959-2000', <https://ro.ecu.edu.au/theses/1488>.
4. Balogun, SA & Philbrick, JT 2014, 'Delirium, a symptom of UTI in the elderly: Fact or fable? A systematic review', *Canadian Geriatrics Journal*, vol. 17, no.1, pp. 22–26.
5. Falvey, JR Mangione, KK & Stevens-Lapsley, JE 2015, 'Rethinking hospital-associated deconditioning: Proposed paradigm shift', *Physical Therapy*, vol. 95, no. 9, pp 1307-1315.
6. Nasser, R, Parrish, CR, & Bridges, M, 2019, 'High output ileostomies: The stakes are higher than the output', *Practical Gastroenterology*, vol. 43, no. 9, pp. 20-33.
7. Nightingale, J & Woodward JM 2006, 'Guidelines for management of patients with a short bowel', *Gut*, vol. 55 (Suppl 4): iv1–iv12, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2806687/>, Accessed July 2020.

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Living with a stoma does not have to mean accepting peristomal skin complications. Helping the skin around the stoma stay healthy goes a long way in enhancing the quality of people's lives.

The **Dansac NovaLife TRE** ostomy barrier is designed to help keep skin naturally healthy with 3 levels of protection:

Adhesion, Absorption and pH Balance.

The best skin is healthy skin.

For more information contact your local representative.



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