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Commentary

Peristomal skin complications: new materials needed to ease the ostomy care market

Linked Article: Sætre *et al. Br J Dermatol* 2023; https://doi.org/10.1093/bjd/ljac122

The current issue of the *BJD* features an article by Sætre *et al.* which reports a randomized controlled trial that tests a new ostomy baseplate with skin-protection technology designed to mitigate peristomal skin complications (PSCs).[1] This trial used Coloplast's Ostomy Skin Tool 2.0 to evaluate the peristomal skin,[2] and compared a current product with a new investigatory material designed to immobilize digestive enzymes from bowel fluids that can leak and penetrate beneath the baseplate of a stoma adhesive. The use of this material is intended to reduce the damaging impact of these enzymes on the peristomal skin surface. The study was carried out in 79 regular ostomy users and demonstrated a significant reduction in PSCs in users who adopted the enhanced baseplate technology, compared with the technology of the current product.

The dermatological community may not have an awareness of the complex issues that affect ostomates with PSCs. The stoma itself is an artificial opening between a patient's digestive tract and the skin, providing an outlet for urine and faecal matter from the body. Although an ostomy is often considered a treatment of last resort, owing to its dramatic impact on patients' lifestyles, it is a life-saving procedure known to mitigate the worst aspects of many debilitating bowel diseases.[3] It introduces many permanent challenges to a patient's lifestyle and mental health, as the removed stool needs to be collected and disposed of in a sanitary and efficient manner, commonly into a wearable pouch that adheres to the skin. Patient demand has created a growing international market for alleviating symptoms, including special training for nurses and healthcare professionals to advise on best practice for the care and treatment of ostomates,[4] and the development of a large range of ostomy care products to mitigate common issues.

Peristomal dermatitis is often considered a reaction to bodily fluids, and until recently was most commonly associated with leakage or spills arising from a poorly fitted baseplate. Traditionally, in relation to dermatological issues, users would often be advised to cease irritating the affected area, but it is not possible for patients with a stoma to cease wearing their ostomy pouches. It is now recognized that the stoma devices themselves represent a potential cause of contact dermatitits.[5] Owing to the variability in positioning of the stoma around the abdomen, the diversity of body shapes and sizes, and the susceptibility of the area to bodily movement, it is important that a substantial and lasting adhesive connection is made between the pouch and the peristomal skin. The ostomy adhesive material must form a strong bond to the skin – if the baseplate accidentally disconnects from the wearer, the leakage is both irritating to the skin and unpleasant for the wearer – but must also be easily removable, allowing for replacement multiple times a day. Every time the adhesive layer is removed it risks stripping protein layers from the stratum corneum, over time reducing skin integrity and skin barrier function and potentially leading to medical adhesive-related skin injury.[6]

As the stoma requires personal medical intervention, users often show strong consumer loyalty once they find a product that suits their needs.[7] Therefore, it is good to see continued innovation in this market, with medical device manufacturers seeking new baseplate materials that could potentially reduce irritation to this highly sensitized area of the skin. The evidence presented shows a significant reduction in PSCs, and provides a strong indication that these changes could have an impact in improving users' quality of life.

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