Game Changer: Use of an Innovative Spouted Hydrocolloid Ostomy Barrier Seal to Manage a High Output Ileostomy

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Introduction

Stomal complications negatively affect health-related quality of life and may occur at any point following ostomy creation. Evidence suggests complications develop within the first five years following stoma surgery. A retracted stoma, effluent leakage from the pouch system, and lack of adequate pouching surface for adherence can lead to peristomal skin complications that affect patient quality of life as well as creating impediments for the patient and practitioner. This case discusses how convexity alone was inadequate to prevent leakage and how care management required implementing the use of an innovative hydrocolloid barrier ring designed with a spout to assist and direct flow of the effluent for containment while increasing wear time and simultaneously managing a severe case of chemical Contact Dermatititis.

Method

A spouted hydrocolloid ostomy barrier ring in conjunction with a convex one-piece appliance was used to direct ostomy effluent from a retracted stoma with a downward and slanted os. The flow assist technology of the spouted barrier seal optimized drainage flow directly into the appliance instead of between the barrier and seal or beneath the barrier alone. Photographs were taken during the initial assessment and application and on subsequent weekly appliance changes, to determine efficacy in prevention of leakage, reduction in pouch change frequency while improving skin health.

Day 1





Spouted Ostomy Barrier

Seal with Pouch

Application

Week 2

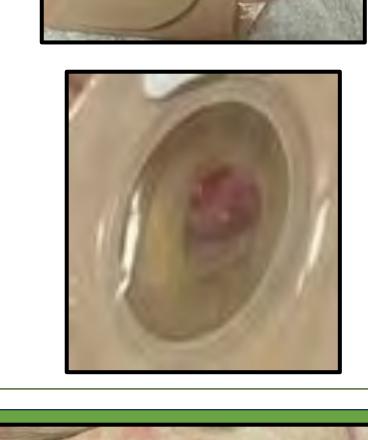


Week 3



Week 4





Case Information

PMHx: 68 y/o Male Persian War Veteran with HTN, DM, Bipolar disorder, PTSD, Anxiety, COPD, colon adenocarcinoma 2020), s/p ex-lap with hemicolectomy with diverting loop ileostomy 2/2 pneumoperitoneum 03/2023 with a complicated post-operative course secondary to an ileus and anastomotic micro-perforation.

HPI: The patient had several weeks of extreme effluent leakage from his high-output fluidic stoma with the inability to maintain an adequate pouch seal. He was provided with an urgent appointment in the General Surgery clinic.

Conclusion

The spouted hydrocolloid barrier ring provided significant benefits by protecting the skin while directing the effluent flow into the pouch. Pouch wear time increased to six days with no further leaks; skin was able to be treated and skin health improved tremendously. The spouted hydrocolloid was crucial for care management of this challenging case. It was used for 4 weeks with each pouch change until the Vet was hemodynamically stable and returned to the OR for ostomy takedown.

References

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**Ostoform Barrier Rings with Flow-Assist Technology TM, Ostoform LTD.