Use of a Fistula Pouch* to Manage Clinically Challenging Drainage Containment Situations

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Introduction

Certain clinical situations pose drainage containment challenges because of their size or close proximity to other problematic conditions. Three such problems were encountered within a three-month period warranting the use of nontraditional pouching systems. These included: a long draining midline abdominal incision extending distally beyond a deep suprapubic fold, a fistula within an open wound, and a large colostomy stoma close to a copiously exudating midline incision. Without access to large containment devices, either multiple small pouching systems placed next to or on top of each other, or management with frequent dressing changes were the only treatment options for such conditions. Both require frequent changing by the nurse and/or WOCN. Large fistula pouches of varying sizes and shapes allow for successful pouching of not only complex fistulae, but also of other large draining wounds and large stomas.

Case Study 1

K.S. was a 58 year old female who underwent a ventral hernia repair on 2/13/09. 1.5 months later she developed significant abdominal pain and ascites which was suspicious of ovarian CA. On 4/3/09 she underwent a TAH with BSO. Liver biopsy showed cirrhosis and hepatitis C. Her long midline incision subsequently drained copious ascitic fluid from between the staples requiring a drainage containment device. The incision extended distally beyond a deep suprapubic fold. The drainage was successfully contained for over one month with medium vertical fistula pouches with no additional caulking. The pouches were connected to gravity drainage via the attached spout. They were flexible enough to conform into the suprapubic fold, providing 4-7 day seals. The patient often expressed her gratitude to the WOCN's for solving her drainage containment challenge.





Case Study 2

A.M. was an 83 year old female who had 4 ventral incisional hernia repairs over 10-15 years. On 1/29/09 she again underwent an incarcerated ventral incisional hernia repair with mesh and a segmental small bowel resection. She developed an enterocutaneous fistula. In February and March she underwent 2 unsuccessful attempts at surgical repair of the fistula. She was placed on TPN and transferred to a nursing home for fistula management and wound care where NPWT was utilized. In June '09 she was admitted to Aurora St. Luke's Medical Center for fistula management, as NPWT was unsuccessful in healing the wound. A large horizontal fistula pouch was applied. A skin recession at the distal end of the abdominal wound required build-up. The large adhesive cutout from the fistula pouch barrier material was used as a filler in this area. The protective paper backing was removed from the backside of the adhesive cutout and the plastic covering was removed from the top side of the cutout, making it tacky on both sides. It was applied to the distal skin recession before applying the pouch. The large horizontal fistula pouch provided 2-3 day seals.





Case Study 3

J.W. was a 48 year old male who had endured a gunshot wound to the neck. He underwent a C3-6 cervical fusion in 2008 and collapsed in the shower at home post-discharge, resulting in quadriparesis. He subsequently resided in a nursing home where he developed nonhealing infected sacral and ischial pressure ulcers with chronic osteomyelitis. In June '09 he underwent a laparoscopic colostomy for fecal incontinence and to divert stool away from his wounds to allow for wound care. In July '09 he underwent a colostomy revision for cecal perforation and stoma retraction which resulted in a large edematous stoma in close proximity to a midline incision which was draining copious amounts of sanguinous to serosanguinous drainage. The colostomy pouching system had to clear the bleeding incision to allow for dressing changes. Since a 4-inch 2-piece appliance would have covered the incision, an alternate system was necessary. A medium vertical fistula pouch was able to be trimmed medially to provide clearance of the incision for dressing changes. Using ostomy paste as a caulk around the stoma before applying the pouch, 2-3 day seals were attainable despite the copiously draining incision.







Conclusion

Fistula pouches have indications for a multitude of challenging drainage containment situations due to the variety of sizes and shapes available, their conformability, durability, and ability to be connected to gravity drainage for high-output cases. In the above-mentioned scenarios, they provided 4-7 day seals over the copiously exudating midline incision with uneven abdominal topography, 2-3 day seals over the fistula within a large open wound, and 2-3 day seals over the large colostomy stoma near a copiously draining incision. Having immediate access to fistula pouches of varying sizes and shapes became a necessity in our facility as patients with urgent complex pouching needs cannot wait for non-stocked products to be special-ordered. Fistula pouches improve patients' quality of life during challenging times by keeping them clean, dry and odor-free, as well as decrease nursing time/cost spent on frequent dressing changes.

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