

Clinical Challenges Require Creative Solutions

Susan Maditz*, RN, MSN, CWOCN, Brenda Uphold*, RN, BSN, CWON, Janice K. Shreve*, RN, MSN, APRN-BC, CORLN, Marsha Hall*, RN, BSN, West Virginia University Hospital, Morgantown, WV, USA

Diane Bryant**, MS, RN, CWOCN,
Brigham and Women's Hospital, Boston, MA, USA

Melissa Ayer**, BSN, RN, CRRN, CWOCN,
Shaughnessy-Kaplan Rehabilitation Hospital Salem, MA, USA

Overview

Patient management today is more demanding in part due to increased obesity, higher acuity levels, evolving technologies which create new clinical challenges, and different sites of care in the continuum. The WOC Nurse is uniquely qualified to assist in the management of patients with various clinical challenges including difficult stomas, ostomy complications, fistulas, and wounds.

The wound, ostomy, continence, and skin care knowledge of the WOC Nurse provides a solid foundation for the management of these patients. In large medical centers, some of the most challenging patients are cared for. These experiences enhance the ability of the WOC Nurse to adapt. Their knowledge of products and pouching techniques are called into practice every day.

Through the presentation of multiple complex case studies, we will illustrate the problem solving processes and lessons learned which improved patient outcomes. Techniques and approaches were often modified and refined to achieve a satisfactory solution. In addition, through these case studies we will emphasize the importance of collaboration with colleagues. Although products may vary across the world, the WOC Nursing principles are the basis for these clinical solutions.

Case Study 1: Multiple Tube Sites

History: A 56-year-old patient was diagnosed with pancreatic cancer and required a Whipple procedure, biliary stent, and feeding tube insertion. During his recovery he developed *C. diff* colitis.

Problem: His tube insertion sites drained both around and through the tubes in copious amounts. His abdominal skin began to deteriorate from the constant exposure to the caustic, biliary fluid.

Positive Outcomes: The Hollister **Premier** High Output Pouch was utilized to collect the drainage from around the tube in the right abdomen and still allow for the Jackson-Pratt (JP) drain to exit the opening (Photo 1). The Hollister Vertical Tube Attachment Device (VTAD) was used to secure the JP drain in the left abdomen that was not leaking from around the tube (Photo 2). An ostomy accessory, the

Premium Skin Barrier, was placed around the Foley-type feeding tube that had minimal leakage from around the tube (Photo 3). This patient's abdomen required utilization of three different



Case 1 Photo 1

techniques for tube management with varying amounts of drainage from around the tubes. Through this use of products, the drainage was contained and the patient's skin was protected.



Case 1 Photo 2



Case 1 Photo 3

Case Study 2: Complex Fistula

History: A 57-year-old male admitted with an upper respiratory tract infection after a recent trip abroad. He subsequently developed a diaphragmatic rupture with herniation of the right colon and liver, with perforation of the colon. Over the next year, the patient underwent multiple surgical procedures. He was finally discharged with a manageable pouching system using a Hollister Premier High Output Pouch, which gave him a four day secure seal (Photo 1). The patient was able to return to work and maintain a family life with routine visits to the clinic and periodic short hospital stays. Eventually, this patient returned for an elective closure of the enterocutaneous fistula. He then experienced multiple complications



Case 2 Photo 1

including sepsis, leaking anastomosis site, respiratory failure with tracheostomy, and renal failure which required dialysis three times a week.

Problem: The complexity of his care and overall physical condition meant he was not ready to be managed at home. As a result, he was eventually discharged to a rehabilitation facility (Photo 2).

Positive Outcomes: The key learnings from this patient include good communication and collaboration between the WOC Nurses in both facilities to ensure continuity of care. Eventually he was able to return home. Good communication between the nurses and family eased the transition for the patient.



Case 2 Photo 2

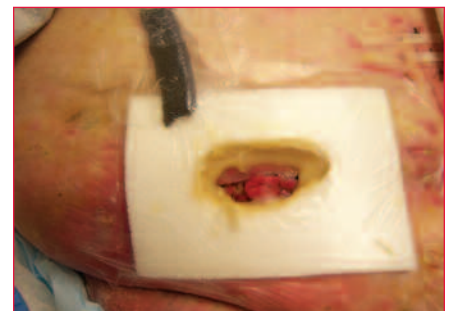
Case Study 3: Double-Barrel Ileostomy

History: A 67-year-old female admitted for a four vessel coronary artery bypass surgery. Four days after surgery, she developed worsening abdominal pain and early sepsis requiring a resection of ischemic bowel and a temporary double-barrel ileostomy.

Problem: The stoma was placed into a large, soft abdominal skin fold. Multiple techniques, products, appliances, and skin applications were employed by the nursing staff in an effort to contain the high output of small bowel effluent. Her skin became denuded, painful, and worsened daily (Photo 1). Nothing would adhere to this reddened, weeping skin.

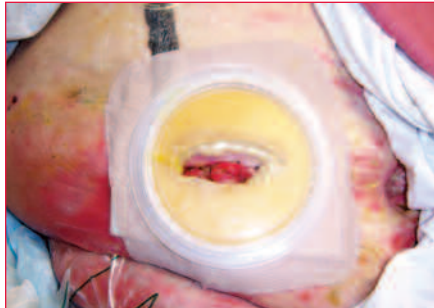


Case 3 Photo 1



Case 3 Photo 2

Positive Outcomes: A negative pressure wound therapy system was applied to the peristomal skin in an effort to obtain healing and a secure pouching surface (Photo 2). A **New Image 4"** skin barrier flange was used to create a secure seal and collect the ileostomy discharge (Photo 3).



Case 3 Photo 3

Positive Outcomes: A Hollister Premier High Output Pouch was successfully used along with several ostomy accessories. The pouch was connected to low wall suction (Photo 2). The patient eventually began eating three meals a day, was on TPN 16 hours at night, and maintained a pouch seal for up to five days. The eventual plan was to discharge the patient to home with a pouch to gravity drainage bag.



Case 4 Photo 2

Case Study 4: High-Output Jejunostomy

History: A 31-year-old female admitted with a complex medical history including Focal Segmental Glomerulosclerosis on hemodialysis, necrotizing pancreatitis, s/p repair of small bowel leak with fistula formation and intra-abdominal sepsis, persistent leukocytosis, pleural effusion, and history of GI bleed. Her surgical procedures were numerous with several post-op complications including necrotizing pancreatitis with debridement, post-op bleeding with clot evacuation, and perforation of jejunum.

Problem: The patient was admitted with a high-output, double loop jejunostomy that measured 2" and was below skin level (Photo 1). Her output was up to 3 liters per day even as the patient was NPO and on TPN.

The peristomal skin was macerated and tender to the touch. The challenge was maintaining a pouch that would accommodate the high output, preserve the skin integrity, and be comfortable for the patient. Per patient report, numerous pouching systems had been utilized without great success.



Case 4 Photo 1

Case Study 5: Multi-Problem Colostomy

History: An 82-year-old female was admitted with a diagnosis of cryptogenic cirrhosis with worsening ascites. The patient had a history of right breast and colon cancer, as well as diabetes and esophageal varicies. Her past surgical history was positive for a right mastectomy and a left lower quadrant colostomy. She was admitted to the hospital for TIPS procedure.

Problem: This patient presents with a difficult to manage stomal site due to the high volume of ascites fluid coming from the site. The large, oval stoma was located in the lower left abdomen within soft folds of skin. A peristomal hernia was present. Adjacent to the stoma was a small area of mucocutaneous separation, which

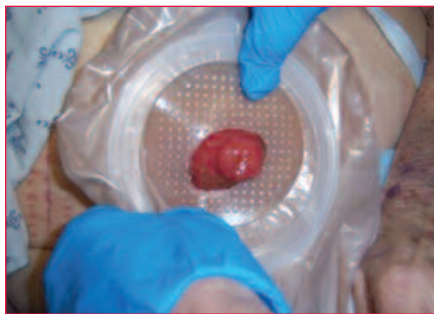


Case 5 Photo 1

served as an avenue for continuous drainage of thin, straw-colored fluid related to the ascites (Photo 1). Caput Medusae was also evident around the stoma.

Positive Outcomes: The patient care goals were to contain a large amount of drainage from the stoma as well as ascites fluid, provide a secure seal over a low stoma on a soft abdomen, protect peristomal skin from trauma, and accommodate a parastomal hernia. All

of these goals were accomplished by using the Hollister Premier High Output Pouch (Photo 2). It was chosen for its flexibility, durable wear time, and adaptability to a multitude of uses.



Case 5 Photo 2

Case Study 6: Medication Administration via Colostomy

History: An 82-year-old female was admitted to the Surgical ICU from the ER with abdominal pain. She had been worked up for a sigmoid colon stricture and was scheduled to have surgery. Upon admission, she was having diarrhea and her labs showed leukocytes. She was taken to the operating room because of the concern of a colon perforation. A sigmoid colectomy was performed and an



Case 6 Photo 1

end colostomy was created. A perforation was not found. Postoperatively, the patient did not improve and her diarrhea worsened. Her stools became more frequent and watery. It was at this point that the ICU team was notified that a stool sample was positive for *Clostridium difficile* colitis. Treatment for *Clostridium difficile*-associated disease (CDAD) is Flagyl® and Vancomycin.

Problem: The WOC Nurses were called because a pouching system was needed that provided easy access to the stoma for administration of the medication every six hours via the colostomy. The Premier High Output Pouch was selected because it provided easy access to the stoma and limited exposure to the stool.

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Positive Outcomes: With this approach, the catheter was able to be left in for medication administration with the pouch connected via the soft tap to a bedside collector. This helped to minimize the exposure of the nurses, and other care providers, to the stool. The access window, shape of the pouch, and ease of connecting to a bedside collector made this pouch the best solution for the patient (Photo 1).

Conclusion

We have demonstrated that the resourceful use of products can result in positive outcomes for our most challenging patients. With a higher acuity level seen in our facilities these days, creative clinical solutions are essential.

As WOC Nurses, we are seeing more complex patient problems which we may have never before encountered. This requires our specialized expertise, knowledge of clinical techniques, and products. With a limited formulary in many hospitals, we must use products in varied ways. For example, a high-output flexible pouching system like the Premier High Output Pouch can be used to manage not only stomas, but fistula and tube sites as well.

Sharing and networking with international colleagues is one way in which we can continue to expand upon clinical solutions to some of our most challenging patient situations. Products are just one of the tools at our disposal to address patient needs and improve outcomes.

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