Making the Impossible, Possible!
Caring for an enterocutanous fistula at home

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Patient Background

The Patient, 79-year-old male, sustained a mortar explosion abdominal wound during the Vietnam War resulting in multiple abdominal surgeries, including a colostomy and a reversal. He went on to recover and lead a very successful life. December 2021, the patient presented for a consultation to remove his gallbladder, secondary to gallstones. His medical history included Type 2 Diabetes, high blood pressure, and NPH. A laparoscopic cholecystectomy was performed in December 2021 and during surgery, dense adhesions throughout the patient's abdomen were observed and noted.

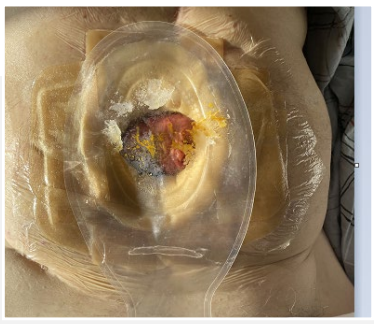
Two days after the initial surgery, the patient returned to the OR for exploratory laparotomy, ileocolic resection and small bowel resection for suspected bowel perforation. A 1mm anastomotic leak was noted at the umbilical port and described as prior ileocolic anastomosis. The patient was transferred to the SICU with sump and Penrose drains in the abdomen.

Six days post exploratory laparotomy, enteric contents were seen draining from the midline incision and an enterocutaneous fistula was noted. WOC nurses changed his pouch every 24-36 hours with mixed results (sometimes he had leakage and denuded skin, sometimes he had no leakage). While hospitalized, his care was complicated by COVID-19 in January 2022, along with major deconditioning, PTSD flashbacks to the Vietnam War, confusion, and a fall. Although the patient was on a strict NPO diet, had a PICC line in place, and was receiving TPN and IVF bolus supplementation when needed, his family advocated for discharge home in hopes to better meet the patient's psychological needs. He was discharged home where 24-hour nursing and a home health agency were implemented with non-ostomy certified clinicians assigned for weekly home health visits.

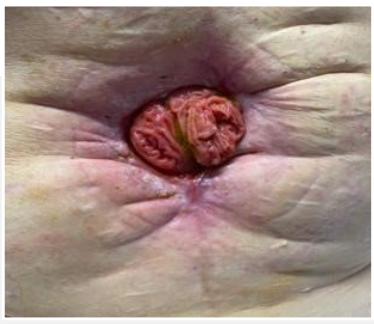
Objective

Enterocutaneous Fistulas are a huge physical, financial, and emotional burden for patients and their caregivers.[1] With this patient, at-home management became essential to protecting his mental wellbeing and decreasing risk for complications such as Hospital Acquired Infections (CLABSI, CAUTI etc.), pressure injuries, falls and confusion which can occur during prolonged hospitalization.[2] The goals for care at-home were to improve his mental status, decrease risk of falls and infection, and improve his quality of life by having him with family. In order to do this, it was imperative that he be safely cared for at home with good nursing care, allowing for increased activity to combat his deconditioned state, and access to products that could contain the fistula output while protecting the peri fistula skin.

Feburary 11, 2022



March, 8, 2022



April 15, 2022

August 2022

Methodology

At the beginning of home care, the patient's skin became denuded and irritated, resulting in pain, anxiety, and more difficult pouch application. During dressing changes clinicians noted leakage of the barrier component, necessitating more frequent changes or alternate products, approximately every 1-12 hours. PTSD flashbacks to the Vietnam War caused him to become combative with nursing staff and his family worried they would need to have him readmitted to the hospital. They even considered having him moved to a hospice facility.

The nursing team enlisted the help of Certified WOC nurses with the goal of allowing the patient to remain safely in his home. The WOC nurses provided targeted care methodologies to the patient including: wound, ostomy and fistula management, coordination of treatment, patient advocacy and emotional support with the goal of maintaining the patient in the home care setting.[2] The treatment approach that resulted in reliable 48-hour seal, effective containment of the effluent and improved per fistula skin included:[3]

- eakin **Wound Pouch**™ (SKU 839261)
- eakin **Cohesive**® paste (SKU 839010)
- eakin **Cohesive**® seals (SKU 839005, 839001)

The patient had 3-5 visits per week from a WOC nurse who provided assessment, skin care and pouch changes. The WOC nurses assessed the topography of the abdomen, filled the many creases with eakin **Cohesive**® seals and a small bead of paste in order to create a level pouching surface. They then cut the opening to the eakin **Wound Pouch**™ to size and scored around the opening to allow the pouch increased flexibility when the patient moved. Ultimately, decreasing the patient's pain and anxiety surrounding the pouch changes.

Results

Through consistent care provided by two WOC nurses, the denuded skin healed and trusting relationships were formed.

The patient's physical and mental status also markedly improved, he began to eat and the TPN and PICC line was discontinued, thus decreasing risk factors for infection. His weight was maintained and his nutritional status improved. The patient performed ADL's, enjoyed time with his family and even went out to dinner.

In July 2022, the patient had surgery with a team of colorectal and plastic surgeons. They were able to carefully repair the fistula and close the abdomen with a primary closure and no grafting. The patient was discharged home on POD 5.

Conclusion

Complex fistulas are a challenge for patients and caregivers. Having access to great products that protect the skin and provide reliable wear time is crucial for patient recovery. It is also vital to have access to Certified WOC nurses who can provide regular assessment and evaluation of the skin. eakin **Cohesive**® products were a great solution for this very challenging fistula. Having access to the various products such as the no sting eakin **Cohesive**® paste, eakin **Cohesive**® seals and eakin **Wound Pouch**™ made providing a reliable wear time to this patient possible. The flexibility and conformability of the eakin **Cohesive**® seal was a great solution for this patient. The condition of his skin improved significantly and as his skin healed, he had no pain with his eakin **Wound Pouch**™ changes. Access to fistula products and specialized nursing care increases quality of life, survival rates and decreases excessive costs of inpatient care substantially.[1]

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1. WOCN. (2015, March 15). The Wound, Ostomy, And Continence Nurses Society™ (Wocn®) Support Of Medicare Coverage For Enterocutaneous Fistulas. Mount Laurel; WOCN: Wound Ostomy and Continence Nurses Society. https://cdn.ymaws.com/member.wocn.org/resource/resmgr/document_library/Support_of_Medicare_Coverage.pdf
2. Brooke, Jillian; El-Ghaname, Amanda; Napier, Karen; Sommerey, Laureen. Nurses Specialized in Wound, Ostomy and Continence Canada (NSWOCC) Management of Enterocutaneous Fistula and Enteroatmospheric Fistula: Development of Best Practice Recommendations. Journal of Wound, Ostomy and Continence Nursing: July/August 2019 - Volume 46 - Issue 4 - p 346-347 doi: 10.1097/WON.0000000000000554
3. Le, F. G. P. (2022). To pouch or not to pouch?: Enterocutaneous fistula and the effective use of a wound pouch. Journal of Stomal Therapy Australia, 42(1), 14–17. https://doi.org/10.33235/jsta.42.1.14-17