23rd World Nurse Practitioner Conference

September 28-29, 2017 Dubai, UAE

Use of a fistula isolation device and negative pressure to promote wound healing

Kersten E Reider Reading Health System, USA

Statement of the Problem: Entero Atmospheric Fistulas (EAFs) are a common complication of open abdomen bowel surgery with an estimated 2-50% of patients developing fistulas post-surgery. The presence of an EAF increases patient morbidity and provides a challenge to the wound care team. Traditionally, management of EAFs has involved placing a large fistula management pouches over the wound to collect and contain effluent. However, more recent techniques isolate the fistula and apply Negative Pressure Wound Therapy (NPWT) to the rest of the wound. I isolated an EAF and applied NPWT to a large abdominal wound to promote granulation tissue formation and decrease wound dimensions.

Methods: A fistula management pouch was utilized for several months to encompass the wound and contain effluent. This method proved to be ineffective. The fistula was then isolated utilizing a collapsible enteroatmospheric fistula isolation device and an ostomy appliance to contain effluent. The wound was then managed with Negative Pressure Wound Therapy (NPWT).

Findings: A 54-year-old morbidly obese female was admitted with a small bowel obstruction and large ventral hernia. The patient underwent an exploratory laparotomy with lysis of adhesions and ventral hernia repair with mesh placement and she ultimately developed an EAF. Contraction of wound edges and presence of granulation tissue were observed after NPWT use in the wound bed around the isolated EAF. The patient was successfully discharged to home under the care of visiting nurses.

Conclusions: The application of the collapsible enteroatmospheric fistula isolation and effluent containment devices in conjunction with NPWT produced positive patient outcomes, including patient satisfaction, decrease financial burden, promotion of wound healing and ultimately wound closure.

Kersten.reider@readinghealth.org