Management of Complex Abdominal Wounds with Fistulas: A Multiple Case Series

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BACKGROUND

Three patients with acute abdominal wounds with high output fistulas were cared for by the WOC Nurse team in the hospital.
CASE 1- Has biliary fistula- Biliary fistula is an abnormal communication between the biliary tract and skin (link.springer.com). Biliary fistula is a type of fistula in which bile flows along an abnormal connection from the bile ducts into nearby hollow structure (e.g. skin) (Wikipedia.org)
CASE 2- Has Enterocutaneous fistula- An enterocutaneous fistula (ECF) is an abnormal connection that develops between the intestinal tract or stomach and the skin. As a result, contents of the stomach or intestines leak through the skin (General Surgery.ucsf.edu)
CASE 3- Has Enteroatmospheric fistula- An enteroatmospheric fistula is a special type of ECF where the intestines surface through the skin, exposing the intestines to the atmosphere and external environment (atmospheric) (November 9, 2020, The Insides log, Insidescompany.com) (Emma Ludlow)

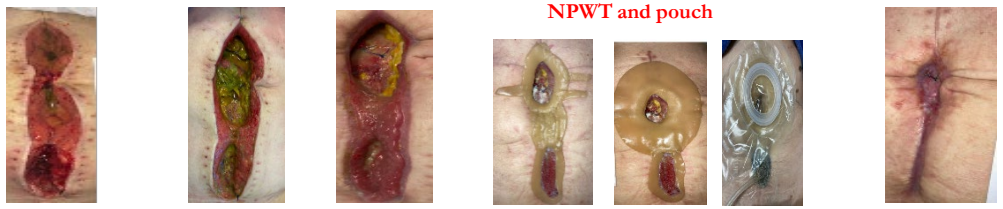
PURPOSE of Innovation

Goals of abdominal wound care and fistula management are prevention of skin loss, minimization of social isolation and pain, effective control of effluent and facilitation of wound closure.

METHODS

CASE Study 1- An adult patient was admitted with a history of pancreatic head adenocarcinoma s/p whipple procedure. On POD 7, wound manager was applied to dehisced mid abdominal wound. On POD 25, treatment plan changed to NPWT application with biliary fistula isolation. On POD 28, patient was discharged home with continued care in BCT by WOC Nurse team 2x/week. On POD 56, patient was discharged in BCT and taught on how to change dressing on abdomen. Fistula output was minimal, wound healed and she was advised to follow-up with General Surgery Team.

Innovation: Application of rings NPWT and pouch



POD 7 Start of WM pouch | POD 11 | POD 25 Start of NPWT | POD 56- discharged from BCT

CASE Study 2- An adult patient involved in gunshot wound to the abdomen. Abthera vac was applied on POD 1, then switch to regular NPWT on POD 4. On POD 29, enterocutaneous fistula noted on mid abdomen wound. NPWT applied with fistula isolation. On POD 64, patient was discharged home. Taught patient and wife on how to do dressing change. Instructed to follow-up in UNLV clinic.

Innovation: Application of NPWT, rings and WM pouch

POD 4-start of NPWT With white and black foam | POD 29-with fistula noted | POD 49- patient discharged

CASE Study 3- An adult patient admitted with altered mental status and diffuse abdominal pain. Patient underwent thorough 60 degree liposuction earlier that day. Had emergent exploratory lap the same day. NPWT started on POD 5. On POD 32, enterocutaneous fistula noted . Applied NPWT with fistula isolation. As treatment plan of care continues, enterocutaneous fistula became enteroatmospheric fistula. ON POD 78, NPWT discontinued and new plan of care was application of wound manager pouch. Patient was discharged in the hospital on POD 84. Continued care in BCT by WOC Nurse team 2x/week.

Innovation: Application of rings, NPWT and WM pouch

Innovation : Application of WM pouch

POD 5-start of NPWT | POD9 | POD 32 | POD 78 NPWT stop | POD 174

RESULTS

WOC Nurse team creativity, unique approach in creating fistula isolation, consistency, POC discussion at morning WOC Nurse huddle, team member support, collaboration, documentation and communication of plans through photo documentation and charting led to successful management and transition of care, promoting wound healing and positive patient outcomes.
CASE 1- Discharged in the hospital and followed in BCT by WOC Nurse team and discharged with dry dressing on POD 28 (BCT frame).
CASE 2- Discharged in the hospital on POD 64- followed by home health.
CASE 3- Discharged in the hospital on POD 84- presently seen in BCT by WOC Nurse team for wound and fistula management.

CONCLUSIONS

These cases exemplify the true core of WOC Nursing resilience, commitment compassion and improving the quality of life and feelings of social isolation of patient.

REFERENCES

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