WOC Complex Plan of Care

Name: Charina Hanley **Date:** 7/22/24

Clinical Focus: Wound ☒ Ostomy • Continence •

Number of Clinical Hours Today: 9

Pertinent Medical/Nursing History	Pertinent lab/diagnostic test results
67 YOF with PMH of HTN, HLD, morbid obesity, endometrial cancer (s/p ex-lap), TAH, BLSO, SBR, adjuvant RT, incisional hernia s/p TAR, cholecyctectomy, SBR 6/4/24 c/b anastomotic leak and ECF formation on 6/28/24 upon surgical removal of mesh. Client was briefly discharged to a SNF on 7/16 , but facility did not have TPN on stock, and was at facility for 2 days. No TPN was given, and amount of IVF given while at SNF is not known. Patient was prescribed 3,250cc's of TPN daily at discharge. Due to issues at SNF, client was sent to outside hospital ED on 7/17, and transfered back to Cleveland Clinic due to concerns for sepsis. Also at outside hospital, client begans having new onset afib +RVS, and lactate of 6. Client was started on on antiobiotic at outside hospital as well as crystalloid. Client on TPN back at Cleveland Clinic and also allowed to take clear fluids for pleasure per provider's orders. Previous surgical history of partial colectomy, and radical hysterectomy with ileal resection due to enterotomies in 2019. Recent surgery done on 6/4/24 to repair incisional hernia with mesh. Surgery complicated by 6 hours of adhesolysis, cholecystectomy, and small bowel resection with primary anastomosis. Surgical incision was closed at completion of this surgery. Subsequent surgery on 6/28/24 for an unplanned reopening of the recent laparotomy, drainage of abdominal wall abscess, and explantation of retromuscular hernia mesh. This surgical incision was made at the site of the previous incision. During surgery it was discovered that stool was present in the retromuscular space, and the synthetic mesh was foating within the same space. Not all of the mesh was able to be removed during this surgery. According to the surgeon, perforation of LLQ of bowel was found. A decision was made not to recent the damaged portion of bowel, due to patients recent surgery and condition of her	Collected 7/17/2024 APTT 30.5 (23-32.4 sec) CRP 16.8 (<0.9) <u>Complete Blood Count and Differential</u> **WBC 11.75 (3.70-11)** **RBC 3.4 (3.9-5.2)** **Hemoglobin 9.8 (11.5-15.5)** **Hematorit 31 (36-46%)** MCV 91.2 (80-100) MCH 28.8 (26-34) MCHC 31.6 (30.5-36) **RDW-CV 16 (11.5-15%)** Platelet Count 362 (150-400) MPV 10.9 (9-12.7) <u>Comprehensive Metabolic Panel</u> **Protein, Total 5.1 (6.3-8)** **Albumin 2.5 (3.9-4.9)** **Calcium, Total 8.2 (8.5-10.2)** Billirubin, Total 0.3 (0.2-1.3) **Alkaline Phosphatase 189 (34-123)** AST 22 (7-38) ALT 14 (7-38)

frozen abdomen, as well as the large size of the enterotomy. It was decided that the abdomen was to be kept as is, creating an enteroatmospheric fistula. The remaining ventral wound was then irrigated, retromuscular space packed with 4 kerlix rolls, tied together, covered with ABD pad, and then secured with abdominal binder. Patients wound has been healing by secondary intention since this surgery. Consult to wound care placed for large open ventral wound with enteroatmospheric fistula. Paged to be seen today due to issues with leaking fistula pouch. Wound and fistula pouched together. Fistula is matured, and suspected to originale from small bowel, producing green and brown liquid. Wound is in a large diamond shape in midline of abdomen, approximately 30cm x 15cm x 1.5cm. Wound bed is 90% red and moist, and 10% adherent yellow/dark brown slough. Fistula is located in lower 1/2 of wound bed at 5 o clock position. Periwould skin is clear and intact with the exception of mild erythema at 6 o'clock. Abdomen is soft and rounded, with a slight depression at umbilisic at 9'oclock. Eakin vertical pouch with window removed with adhesive remover. Skin cleansed with soap and water, and gently patted dry. Stomahesive applied to periwound skin, excess powder brushed off. 3M Cavilon to periwound skin. Brava strip paste to unbilicis to fill in crease. Eakin barrier remnants and Hollihesive wedges bordering entire periwound area. Eakin vertical pouch cut with radial slits, and paste around aperture. Pouch placed on an angle with drain spout to pt's left side, and connected to gravity drainage. Mefix tape to picture frame border. Plan for WOC nurse to return on 7/26 for next pouch change. Continue with aforementioned system. Based on previous notes and pictures, wound is progressing and % of slough is reducing. **Braden Score** Sensory Perception – No impairment (4) Moisture – Occassionally Moist (3) Activity – Walks Occassionally (3) Mobility – Slightly Limited (3) Nutrition – (3) Friction and Shear – Potential Problem (2)	**Glucose 122 (74-99)** BUN 19 (7-21) **Creatinine 1.02 (0.58-0.96)** Sodium 143 (136-144) Potassium 4.4 (3.7-5.1) Chloride 107 (98-107) CO2 23 (22-30) Anion Gap 13 (8-15) EGFR 60 (>=60) **Prealbumin 9 (17-36)** <u>Prothrombin Time</u> PT Sec 12 (9.7-13) INR 1.1 (0.9-1.3) Sepsis Lactate 1.6 (<=2) <u>Type & Screen: A-</u> Blood culture collected, incubating. Wound culture from previous admission + for E. Coli, sensitivity to zozyn. Orders placed for follow up wound cultures.

Total = 18 Mild Risk Current medications: Acetaminophen 1,000mg tab PO q8h Acetaminophen 975mg CUP PO q8h Ondansetron tabs 4mg PO q6h PRN Melatonin 3mg tab PO qHS Heparin 5,000 units SC q8h Methocarbamol 1,00mg tabs PO TID Loperamide 2mg caps PO QID Rosuvastatin 10mg PO daily Aspirin, enteric coated 81mg PO daily Trospium 20mg PO BIS Metoprolol tartrate short acting 12.5mg PO q12h IV Medications: Hydromorphone 0.3mg IV q4H PRN Ondansetron 4mg IV injection q6H PRN Lactated ringers 150mL/hr IV continuous Piperacillin-tazobactam IV piggyback 3.375g in dextrose 50mL q6h	

Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
Large ventral wound with enteroatmospheric fistula	1. Change fistula pouch every 4 days 2. Cleanse wound with Vashe 3. Cleanse periwound area with warm water and gently pat dry 4. Measure dimensions of wound, length x width x depth. ***Then what? What should be done with the***	Wound is closed via secondary intention (if graft not feasible), until fistula can be contained via an ostomy pouch onto healed skin, rather than a large fistula pouch. Mascerated area near 6 o'clock resolves, peristomal skin is clean, dry, and intact. Use of tomahesive powder discontinued when skin	Regular measurements to assess progress of wound healing. If progress stalls, providers should be notified and re-culture of wound bed may need to be done to assess for colonization that could delay healing. ***Citation?*** Use of antimicrobial wound cleansers to promote reduction of

WOC Complex Plan of Care

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	information? 5. Apply Coloplast Brava strip paste to crease in umbilicus ay 9 o'clock 6. Apply stomahesive powder to periwound area particularly around moist skin at 6 o'clock. Brush off excess. ***Any skin barrier sealant for crusting? Identified its use above*** 7. Apply petals of remnant Eakin barrier paste and Hollihesive wedges circumferentially around wound. 8. Cut out aperture for Eakin pouch and include radial slits to accommodate curvature of abdomen. Apply to abdomen. 9. Apply heat packs to pouch to encourage adhesion to skin. 10. Apply Mefix tape to pouch borders 11. Connect spout to gravity drainage. 12. Date and initial on tape Notify wound care nurse if exudate from wound bed increases significantly, or if necrotic tissue begins to	maceration is resolved. Wound culture, if resulted positive for colonization, resolves and is negative at retest after antibiotic treatment is completed. Alternative pouching option with NPWT is able to maintain a seal for up to 4 days. Upon removal of NPWT system, no effluent is noted in foam or at base of wound. Client and nursing staff report no leaks to system in between pouch changes. Pouch system able to maintain seal, no leaks for 3 to 4 days. Patient maintains aseptic status.	colonization. This will be especially difficult due to contact with small bowel effluent, but at this time fistula cannot be isolated from wound. ***Citation?*** Date and initial on tape to ensure that pouching changes are done at scheduled intervals. ***Citation? Can you truly ensure?***

WOC Complex Plan of Care

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	proliferate on wound bed. Alternative pouching system: 1. Measure diameter and shape of matured fistula and prepare a flat one-piece drainable stoma system to accommodate 'stoma'. Apply paste to back of flange. Set aside. 2. Prep peri-wound area with materials mentioned previously. Additionally, apply no-sting barrier film to periwound area. 3. Apply NPWT draping to periwound area and bridge, if needed. 4. If available, apply commercial device used to isolate fistula effluent away from wound base. 5. Apply NPWT foam to base of wound, cutting a ring of foam to fit around base of stoma, leaving some room around it. 6. Apply second layer of drape over entire wound and turn on pump to ensure proper seal. 7. Cut an opening in second layer of drape to		

WOC Complex Plan of Care

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	accommodate matured fistula. 8. Apply stoma pouch over fistula and NPWT dressing. Secure with Mefix tape around borders. 9. Date and initial on both pouching and NPWT system (Nix & Bryant, 2022). ***ok***		
Risk for dehydration, electrolyte imbalance, and malnutrition related to fistula originating in small bowel. ***POC should focus on actual probrlems. Risk can be incorporated into problems. In this case, nutrition is a problem.*** Recent unintended 34 lb weight loss. Patient currently NPO except clear liquds 'for pleasure'. Patient on TPN and IV hydration. Elevated creatinine of 1.02. Low RBC of 3.4 Low Hemoglobin of 9.8 Low Protein, Total of 5.1	Record fluid intake, including IV hydration, fluids in TPN, and liquids she is taking in PO. Record fluid output, including drainage from pouching system, and urine volume. Consult to nutritionist to review current macro and micronutrient levels in TPN, and adjust diet plan if needed to maximize wound healing and hydration. Continue to record I & O's while patient is hospitalized, and notify patient QID of her balances. Discontinue NPO food order and resume enteral feeding. ***This is confusing. Assessment indicates pt is on TPN with po liquid intake. Directive would***	Patient will drink 8 oz of clear liquids of her choosing at least three times a day. ***Reads as a directive for POC.*** If client is ordered for oral rehydration solution by dietician or provider, that will be ingested instead of plain water (Carmel & Scardillo, 2022). ***Citation? Should be included in POC; if rehydration solutions ordered, encourage pt in to ingest.*** ***This is an evaluation statement. I'm not sure what you are citing. Was this their statement as opposed to what you would expect to see?*** Tissues maintain adequate perfusion. Oral mucosa and sclera are not pale or dusky. Hair is shiny and not friable (Friedrich et al, 2022). ***This is an evaluation statement. I'm not***	Imbalances in fluids and electrolytes is highly correlated with increase morbidity and mortality in patients with enteroatmospheric or enterocutaneous fistulas (Nix & Bryant, 2022). Having nutrition regularly involved will help to maintain proper re-feeding of lost nutrients, bile salts, and electrolytes coming from patients small bowel. As fistula is originating in small bowel, output is expected to be high, which will require more rigorous maintenance. ***Citation?*** For replenishment to be adequate, accurate measurement of output, and the quality of the output must be recorded and shared with the care team. ***Citation?***

WOC Complex Plan of Care

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Low Albumin of 2.5 Low Prealbumin of 9 ***This POC does not include assessment findings of Braden score.***	***be to maintain or administer TPN as ordered***	***sure what you are citing. Was this their statement as opposed to what you would expect to see?*** Patients weight stabilizes or increases. Three meals eaten PO a day with at least 80% completion. TPN is discontinued due to adequate PO intake. Patient reports increased energy levels. Ambulates in hall regularly and continues to independently reposition herself in bed. Albumin, prealbumin and serum protein levels return to normal range (Friedrich et al, 2022). ***Citation? This is an evaluation statement. I'm not sure what you are citing. Was this their statement as opposed to what you would expect to see?*** Patient is no longer anemic following introduction of PO foods for 14 days (Friedrich et al, 2022) ***Citation?As above***	Since fistula is now matured, chances of spontaneous closure are very slim (Nix & Bryant, 2022). NPO and TPN orders are recommended to be discontinued once it is determined by providers that surgery will be required to close fistula (Nix & Bryant, 2022). This will allow patient to have better control over her nutrition, and likely improve her chances of her ventral wound completely healing (Friedrich et al, 2022). This patient will need to have her nutrition and healing optimized for at least 6 months to increase the chances of a fistula repair surgery being successful (Nix & Bryant, 2022).

References

Carmel, J. & Scardillo, J. (2022). Adaptations, Rehabilitation, and Long-term Care Management Issues. In Carmel, J., Colwell, J., & Goldberg, M. T. (Eds.), Wound, Ostomy, and Continence Nurses Society core curriculum: Ostomy management (2nd ed., pp. 172-188). Wolters Kluwer.

Friedrich, E., Posthauer, M., Dorner, B. (2022). Nutritional strategies for wound management. In, L. L. McNichol, C. R. Ratliff, & S. S. Yates (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Wound management* (2nd ed. pp. 172-186). Wolters Kluwer.

Nix, D., & Bryant, R. (2022). Fistula management. In, L. L. McNichol, C. R. Ratliff, & S. S. Yates (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Wound management* (2nd ed. pp. 172-186). Wolters Kluwer.

Content		Possible Points	Awarded Points	Comments
Summary of Selected Patient	Summarizes pertinent medical and surgical history	2	2	
Assessment	Describe assessment findings	6	6	
	List current products and interventions addressing WOC needs reflective of the specialty scope of practice (wound, ostomy, or continence)	6	3	
	Wound and Continence Case Study Journal: Using the Braden scale, assess for pressure injury risk. **You must submit your completed Braden	5	1	

	risk assessment with your care plan.			
Planning	Formulate a comprehensive management plan based on the assessment and the specialty (wound, ostomy, or continence) needs. **Wound and Continence Case Study Journal:** Include specific Braden sub-scale scores	12	9	
	Propose alternative products. Include generic & brand names	4	4	
Evaluation	Identify plan of care evaluation parameters that demonstrate the desired outcomes	6	6	
Rationale	Explain the rationale for identified interventions	6	4	
Scholarly work	Rationales referenced & cited according to APA formatting guidelines	1	0.5	
	Proper grammar & punctuation used	1	1	
	References: See the course syllabus for specific requirements on references for all assignments	1	0.25	
	Total Points 80 % or higher is required to pass. Minimum scores: Ostomy: 36/45 Wound and Continence: 40/50		36.75	

Additional Comments:

WOC Complex Plan of Care

Off to a good start. POC lacks holistic approach with incorporation of Braden Risk Scale components. Keep in mind, evaluative statements do not require a citation as they are statements of what you would expect to see. It is the rationalse for your directives and POC that require the citation.

Reviewed by: Kelly Jaszarowski Date 8/2/2024