WOC Complex Plan of Care

Name: __Jennifer Lemert______________________________ Date: N/A, case selection from capstone case options

Patricia, I chose this case study from the capstone options. In reading the pertanent history, there were some spelling corrections I made. Additionally, I deleted the date of the cystoscopy, as I assumed it was recent. Finally, I modified information in the note to reflect correct pouch selection based on ostomy measurement, as well as detailed some of the steps described to be consistent with what I would have done. Thank you, Jennifer

Pertinent Medical/Nursing History	Pertinent lab/diagnostic test results
68-year-old postmenopausal female with bladder cancer discovered during a cystoscopy. Biopsy results indicated malignancy. Patient underwent radical cystectomy with ileal loop urinary diversion. Patient seen pre-operatively and stoma site marked. Being seen today, POD 1, for ostomy evaluation and teaching. PMH: bladder cancer, chronic UTI, CKD, diabetes mellitus, hypocholesteremia, hypertension, migraines, mitochondrial disease, obesity, polycystic liver disease, spinal stenosis, thyroid nodule, tinnitus, breast cancer. Surgical History: breast lumpectomy (2018, 2019), cystoscopy, dilation and curettage, exploratory laparotomy. Home medications: Anastrozole, Atenolol, Basaglar Insulin, Cardizem, Chlorpheniramine, Chromium Picolinate, Cinnamon, Cranberry, Desipramine, Diphenhydramine, FeroSul, Fluoxetine, Fluticasone inhaler, Gabapentin, Gemfibrozil, Hydrocodone, Lasix, Losartan, Novolog Flex pen, Omega-3, Tamsulosin, Vitamin B12, Vitamin D3. Allergies to Atorvastatin and Sulfa. Patient sitting up in bed utilizing pillows for abdominal splinting. Patient instructed on visit plan and agreeable. Hollister two piece cut to fit 2 ¼” urostomy pouching system in place to RUQ loop urostomy. Light red colored urine in small amount noted in pouch. Two stents visible; one red, one blue. Bilateral JP drains in place to RLQ with serosanguineous drainage noted in bulb drainage collectors. Midline abdominal incision with intact island dressing, minimal amount of serosanguinous strike through drainage present. Patient reports episodes of fecal incontinence. She states: “I feel like I am leaking stool.” Patient is agreeable to dressing changes and ostomy teaching. Urostomy appliance removed. Peristomal skin intact and without irritation. Mucocutaneous junction intact with visible sutures. Stoma beefy red in color, moist, and protrudes approximately ½ inch above skin level. The stoma is round. Peristomal skin cleansed with water and patted dry. Gauze pads use to manage drainage from stents. A circular measurement guide is used to size stoma as 2 inches (51mm). A new 2 ¾ soft convex barrier is cut to this size, backing is removed and retained for next re-sizing. Stoma and stents fed through this	WBC 8.1 RBC 4.03 Hgb 12.0 Hct 36.1 Sodium 137 Potassium 3.6 Chloride 99 CO2 25 Anion gap 13 Glucose 98 Calcium 9.1 Magnesium 1.5 Phosphorus 3.7 Total protein 6.5 Albumin 3.7 Height 160.02cm Weight 97.7kg BMI 38.1 Vitals: HR 66 Temp 99.1 BP 110/60 SaO2 97% room air Finger stick glucose 101 Pre-op CXR: unremarkable Pre-op EKG: normal findings

opening. Urostomy drainable pouch snapped onto barrier. Patient is encouraged to gently hold her hands over the stoma and pouch to warm the system, encouraging better adhesion. Explanation of appliance change provided with demonstration. Patient is attentive. All questions are addressed. Patient is instructed to assist with emptying pouch. Additional appliance left at bedside for patient practice attaching pouch and operating drainage spout. Midline incision dressing removed. Incision measures 15cm x 1cm x 0.25cm. Peri-wound without induration, redness, irritation. Surgeon at bedside at time of dressing removal and aware of clinical findings. Site cleansed with NS. A hydrogel impregnated gauze dressing is applied to wound bed, covered with ABD pad, and secured with silicone tape. Discussed splinting and option of an abdominal binder for pain control. Pt verbalized understanding. She reports her abdomen is "tender" and she has some difficulty splinting with respiratory toilet and repositioning. Encouraged to seek assistance of nursing with repositioning, respiratory toilet. She verbalized understanding. Perineal/perianal area is slightly red, blanchable, and without satellite lesions. Discussed use of soft clothes and/or peri bottle for cleansing. Skin barrier ointment left in room for use prn. Discussed body worn absorptive product (BWAP), but did not advise use if she is able to call for assistance with toileting, as BWAP do not effectively absorb stool. Patient states "I will try the wipes and barrier first and check myself more frequently." I listed foods which might help to thicken stool when able to ingest, and she verbalized understanding. WOC Services to follow and continue to provide ostomy, wound and continence support.	Abdominal CT: taken but report unavailable

Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
68-year-old female Post Operative Day (POD) #1 Radical Cystectomy new loop Ileal urinary diversion. SKIN/WOUND CONCERNS Surgical incision separation with 1cm gap between skin edges, likely from suture failure of subcuticular or subcutaneous sutures. The wound is not deep (0.25cm), and is not through to fascia. It has no sign of infection.	Local wound care to promote rapid healing. Initial dressing is a hydrogel sheet covered with an ABD Pad and held in place with tape. Dressing change should be every 2-3 days. These dressing changes to be done in same fashion as above, irrigating wound with saline at each change with reapplication of hydrogel until wound begins to epithelialize.	The goal of healing in this acute surgical wound is predictable, timely, closure, without further dehiscence or infection over 4 weeks.	Acute wounds close with a predictable sequence of "hemostasis, inflammation, fibroplasia, epithelialization, and maturations" in a timely fashion. (Beitz, p. 45, 2022). The hemostasis phase has passed. A hydrogel sheet (a moisture retentive dressing) over this acute, postoperative, minimally draining, non- infected wound, assures a moist wound environment, insulates the wound temperature, and absorbs some exudate. The dressing will protect the wound from drying out, and from microbes. This dressing is atraumatic on removal and only needs to be changed every 2-3 days (Brumberg, Astrelina,

	*An alternative dressing would be Polymem. The length of the wound would require a large strip of Polymem as a primary dressing and an adhesive to hold the Polymem in place. A transparent film (Tegaderm) or transparent tape can be used. Changing the dressing should happen when the Polymem changes color, indicating that it is saturated. This is typically every 2-7 days. Polymem cleans the wound continuously, so saline irrigation with dressing change is not needed unless exudate or slough is in the wound at dressing change.		Malivanova, & Samoilov, 2021). The role of this dressing is to support rapid healing without complication. Finally, the dressing can have a cooling effect and thereby reduce pain at the incision site (Beitz, 2022). *Polymem has all the advantages of a hydrogel and cleans the wound by encouraging moisture transfer from the body into the wound and then into the dressing. Polymem's surfactant has low cell toxicity. Because of these qualities, Polymem is inherently antimicrobial. If patients forget when they last changed their dressing, they do not need to try to remember, they just look to see if the dressing has changed color, indicating that it needs to be changed (PolyMem: The ideal dressing, n.d.). *This patient does have some risk for wound infection since she has diabetes, but in an acute surgical incision separation without infection, use of an antimicrobial dressing is not well supported by the literature (Brindle & Creehan, 2022).
Post-operative wound in the setting of Diabetes, CKD, Obesity, Cancer and post operative status with possible pre-existing malnutrition	*Nutrition consults for diabetes, obesity, CKD, bladder cancer and previous history of breast cancer. *Confirm diet order with physician, anticipating at least clear or full fluids diet is already in place and will be advanced as tolerated. *With CKD and post operative status, some anemia is already present, serum albumin >2.2 is reassuring, with wound, may need further lab evaluation for malnutrition. Confirm with surgeon need for orders for prealbumin, serum iron, serum transferrin.	Tolerates clear fluids on POD#1 without vomiting or ileus, advance diet as tolerated	Malnutrition strongly and negatively affects surgical recovery and wound healing. Chronic disease that contributes to malnutrition is common in hospitalized patients. Surgery results in a catabolic state which is often prolonged when a patient has poor oral intake post operatively because of post operative pain, medication, sedation, nausea, vomiting, or NPO status. Early introduction of calories after surgery, as opposed to waiting for bowel tones to return, does not worsen long term outcomes (Romanowski & Askari, 2023). Nutrition consults appropriate.

Risk. for pressure injury (PI) secondary to altered mobility, post operative pain and chronic mitochondrial disease, as well as possible malnutrition in the setting of DM, CKD, and Obesity.	Preventative interventions geared to recognizing PI risk with Braden scoring, and risk reduction with adequate activity, nutrition, and pain control, and skin care.	No pressure injury during this hospitalization	Pressure injuries risk is reduced with offloading, adequate mobility, adequate nutrition, and good skin care. (Borchert, 2022).
Braden score 17: 4 points for no sensory perception limitation, 3 points for occasionally moist, 2 points for chair fast, 2 points for mobility very limited, 2 points for nutrition, probably inadequate (her nutrition pre op may have been adequate and once she returns to a full diet, it may return to adequate within five days). Finally, 2 points for friction and shear. She has a mild risk for pressure injury.	Braden scale to be completed daily. How much this patient is moving in bed is not clear from the case study, but if, she is assisted with toileting and skin care and she requires assistance with repositioning, then Q2hour nursing orders for repositioning as well as heel protection can be initiated by nursing. Heel protection can be achieved with pillows or with boots. Specialty bed not necessarily needed at this time.	Braden score documented in chart daily.	Braden scale done daily has been shown to assist nursing staff in recognizing patients that are at risk for pressure injury. It comes with the risk of incorrect scoring. It evaluates risk, but just evaluating risk does not independently reduce actual injuries (Borchert, 2022).
Limited mobility due to post operative status, post operative pain, and mitochondrial disease.	Physical therapy consult requested If physical therapy is not available, nursing staff should be getting patient up to chair and attempting some steps and advancing activity as tolerated.	Out of bed to chair 1-3 times on POD#1 increasing activity as tolerated until independent.	The more mobile a patient, the lower their risk for PI. (Borchert, 2022). Mitochondrial disease presents variably and can be characterized by myopathy with exercise intolerance, weakness, or multisystem disability. This disease state can present during high stress times, such as postoperatively (O'Farrell, 2022). A physical therapy consult will ensure that patient mobility is achieved based on her individual abilities. Also, physical therapy will provide ongoing assessment of functional status in addition to nursing and medical reassessment. Additionally, any assist devices can be provided by PT.

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Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
Post operative pain	Medications as per surgeon Splinting with coughing and consider an abdominal binder.	Pain tolerable and OOB to chair with some steps possible within 1 days of surgery as-long-as patient is hemodynamically stable	External abdominal support improves pain tolerance, and makes it easier for patients to ambulate post operatively. (Saeed, et al., 2019). Improved mobility reduces risk for PI (Borchert, 2022). Reduced pain through splinting also allows for more effective deep breathing and coughing to post operative pulmonary complications (Saeed, et al., 2019).
Potential alteration in skin integrity secondary to FI, this independently increases risk for PI. See interventions under next section.			
CONTINENCE CONCERNS			
New fecal incontinence, likely transient (factors influencing change in bowel habit: ileal resection, altered mobility and weakness post op and compounded by chronic weakness of mitochondrial disease). Bowel complaints are not uncommon in postoperative patients after radical cystectomy (Shariat, Bochner, Donahue, & Pietzak, 2021)	*Q 2-hour toileting-nurse or nursing assistants to check on patient every 2 hours to help in repositioning and with toileting. Shift skin checks. *document # stools with I&O to determine if diarrhea is present. *Physical Therapy consult as above *Skin care: wash off any stool with PH balances skin cleanser and soft disposable wash cloths. Apply zinc based or other hospital provided barrier cream, no need to completely clean off with every stool, just clean off stool. *Assist with bedside commode, if possible, to encourage mobility and empower patient to call for help for toileting.	Improved FI as patient recovers from surgery, gets stronger and starts to eat more and solid foods. Nutrition consult already in place and can address any ongoing loose or diarrheal stools that persist as diet is advanced to include solid food.	Worsened IAD can be avoided by frequent toileting to reduce incontinent episodes, keeping the perianal area clean and dry and protecting the perianal skin with barrier ointment. Promptly washing off stool and keeping surrounding skin dry is important. Prompted toileting and assistance with bedside commode also encourages mobility, and reduces PI risk. Skin checks every shift allow for re-evaluation of IAD. Staff assistance with repositioning and use of commode reduces risk for sheer or friction injury (Thayer & Nix, 2022). Discourage diapers; if requested, leave open when in bed (Thayer & Nix, 2022).

Incontinence associated dermatitis (IAD) secondary to intermittent fecal incontinence. Risk factors for IAD include: recent surgery, weakness, need for assist with position changes, new FI. Pressure injury is ruled out by blanchable nature of erythema, but PI risk is elevated. Candidiasis is unlikely without satellite lesions. OSTOMY CONCERNS New Ileal Loop urostomy New stoma teaching needed	Same as above under new FI Alternative product to barrier cream would be a skin barrier film: Cavilon Once patient is tolerating solids, the foods discussed can be added. Alternatively, Metamucil can be added to her regular medications to jellify stool, and encourage more regular stooling patterns if on opioids. If FI persists after hospitalization, lifestyle modification should be taught: avoid refined sugars, highly fermentable foods, and caffeine. If significant diarrhea, Loperamide PRN can be recommended (Lembo & Spivak, 2023). .	No progression of incontinence associated dermatitis, no further skin breakdown, no secondary candidiasis, no pressure injury.	As above. Keeping perianal area clean, dry, and protected will at least keep IAD from worsening. Because this patient is post operative, likely weaker than usual with her mitochondrial disease, is needing some assist with position changes, and because she now has FI, she at least needs frequent prompting for toileting and if she can independently keep herself clean, dry, and protected, then less monitoring may be appropriate. She may not be able to independently apply the barrier. Hopefully this will improve as she recovers from surgery.
Urostomy is a loop ileal urinary diversion, round and measuring 2 inches (roughly 51mm). The initial pouching system was 2 ¼ Hollister which can not be cut to a large enough opening to accommodate this stoma and have adequate barrier width. This stoma will have two openings that will not necessarily be directed out into the pouch, but may be directed to the mucocutaneous junction and the peristomal skin. The output from this stoma is urine and mucous, so very wet liquid. The mucocutaneous junction and peristomal skin are intact and there is no peristomal dermatitis. The stoma	*Stoma product to use: Hollister 2 ¾ soft convex barrier cut to 51-51mm to accommodate stoma. Urostomy drainage pouch (antireflux) attached to barrier and then to large capacity drainage bag. *Accessories: Adhesive remover wipes Soft washcloths or disposable washcloths and warm water for cleaning peristomal skin. *Include in discharge supplies: cavilon skin barrier single use packets and stoma powder to be used if peristomal moisture associated dermatitis occurs and crusting is needed to protect peristomal skin. *Alternative product if soft convex	By POD#1, patient verbalizes importance in self-care of urostomy and is open to teaching and handling sample pouching systems. Patient is also able to practice attaching sample drainage pouch to sample barrier and can empty sample drainage pouch and verbalize that pouches should be emptied with 1/3 to ½ full. Patient identifies one support person who is willing to also learn stoma care. By POD#3, patient can look at stoma, verbalize understanding of pouch emptying and pouch change procedures and participate in these procedures in a limited way. By discharge to skilled nursing facility, or	In general, patients who have stoma teaching with a WOC have less complications, faster adjustment, and better QOL then patients who do not have stoma teaching with WOC. Hollister products in Hollister and Byram catalogs detail barrier size and cut to fit capacity. A 2-piece transparent pouching system is indicated immediately post op so that patient can see their stoma, see how much urine is in their pouch, can see the stents, and can identify immediately urgent situations: stoma necrosis or no urine output. A soft convex barrier is appropriate immediately post op when output is liquid and likely to leak between

protrudes adequately and is not retracted. Stents remain in place and exit the stoma through the same opening that urine drains.	barrier is not available: flat 2 ¾ barrier. Use stoma ring between skin and barrier to create a pseudo convexity, or at least to provide extra moisture absorbing capacity. Drainage system similar, but may use leg bag instead of large urinary drainage bag, or may empty drainage pouch PRN instead of using and additional drainage bag. Stoma teaching: What is normal *Appearance of stoma is red, moist-not blue or purple *Though not mentioned in the above note, since this is a loop stoma, there may be a rod or a bridge in place to support the stoma initially, this will be removed as per the surgeon *Size of Stoma will slowly shrink over 4-6 weeks following surgery and then size will stabilize *Stoma will drain urine and mucous constantly *Stents will remain unplace until they fall or are removed by surgeon *Discuss normal appearance of stomas in general, show pictures, encourage patient to look at a describe why their stoma is normal at this point *Share pictures of stoma complications and how the pictures are not normal. Pictures to include peristomal dermatitis, stomal retraction and prolapse, peristomal hernia. Encourage patient to make an appt with WOC or surgeon if they do not think their stoma is normal. *Reasons to go to the ED: No urine output, blue or purples stoma, symptoms of UTI-fever, flank pain, nausea,	home health care, patient can empty their own pouch, and can find and follow instructions for pouch change, with assistance, or possible independently. By discharge, a friend or family member is identified and has, at least once, been taught pouch emptying, pouch change and warning signs to call surgeon about or reasons to go to the ED. Patient will register with Hollister secure start prior to discharge Byram supply order will be initiated by WOC prior to D/C Once patient has been discharged by home health and or skilled nursing center, they can make an appt with WOC nurse in the outpatient clinic for any additional stoma care. Patient will have no peristomal skin breakdown seen at pouching change If possible, first shower while patient is in the hospital so that they get used to the idea that they can shower with their stoma pouch in place.	barrier and skin. Soft convexity will maintain an intact barrier longer. A belt may assist in securing the pouch. Emptying the pouch is a necessary skill before discharge (Colwell & Hudson, 2022). Gathering supplies and following Hollister written steps for pouch care facilitates independence. Our patients with ileal conduits are usually transferred to a skill setting for rehab, but still need to be encouraged to gain pouch care skills. Our patients who are discharged to home health have Ostomy nursing services with Ostomy certified nurses. Orders for supplies can be generated before discharge and two weeks of supplies are provided at discharge so that patients do not run out of supplies. Patient teaching includes complications of ileal conduits including emergent complications such as UTI, Acidosis, Urinary obstruction, Stoma prolapse or stenosis and Peristomal hernia. The goal of initial teaching is not for the patient to understand the complications exactly, but are geared towards patients understanding that certain things are not normal: no urine output, fever, flank pain, sudden bloody or foul smelling urine, altered mental status, shortness of breath, rapid respiratory rate, irregular or abnormal heartbeat, syncope, palpitations (Carmel & Goldberg, 2022). Again, patients who have stoma teaching with a WOC have less complications, faster adjustment, and better QOL then patients who do not have stoma teaching with WOC.

	vomiting, abdominal pain, new bloody or foul-smelling urine. Symptoms of urinary retention, hydronephrosis, kidney stone: flank pain, no or reduced urine output. Symptoms of acidosis: altered mental status, arrythmia, elevated respiratory rate, shortness of breath, syncope. Remind patient that after ileal urinary diversion, regular medical care with urology or PCP to monitor electrolytes, kidney function and possibly Vit B12 is necessary. *When changing pouching system follow steps: 1. Gather supplies: new 2-piece pouching system, scissors, measurement guide, adhesive remover, wet and dry wash clothes or soft paper towels, accessories in use (skin barrier film, stoma powder, stoma ring, belt). Small disposable bag for trash. Sterile 4x4 if stents still in place. 2. Wash hands 3. Open and lay out supplies 4. Use adhesive remover and push/pull technique to remove pouch 5. Use 4x4 under ends of stents to catch urine and keep stents off skin 6. Have dry paper towel, Kleenex or TP available to absorb urine output during pouch change 7. Use measurement tool to size stoma and scissors to cut barrier to size to fit stoma. Measure stoma with each pouch change for the first 4-6 weeks until size does not change over one week. 8. Clean peristomal skin with warm water and blot dry. 9. Peel backing from barrier and thread		

	stent carefully through barrier, apply barrier down around stoma.(dog ear paper tabs to make application easier) 10. Close drainage pouch spout and snap down drainage pouch onto barrier 11. Lightly cover appliance with both hands to provide heat that encourages barrier to adhere better to skin. 12. If using and additional drainage bag, use adaptor on pouch spout and then attach additional drainage bag and open spout. Keep drainage bag below the ileal conduit. ***Use Hollister patient teaching guides for new urostomy care, pouch changes, and instructions for emptying pouches.		

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