

WOC Complex Plan of Care

Name: Janet Barylski

Date: 8/9/23

Pertinent Medical/Nursing History	Pertinent lab/diagnostic test results
<p>Patient is a 67-year-old male seen in the clinic today (7/10/23) for WOC consultation visit with a visit diagnosis of attention to artificial opening of urinary tract. He is accompanied by his wife who is a retired nurse. Assessments are detailed below for his end ileal conduit, surgical wound, and end ileostomy sites. His medical and surgical history are extensive and listed below. His non-healing wound resulted from surgery for creation of urostomy with ileostomy repositioning in 10/11/2022. Radiation for cancer caused neurogenic bladder resulting in urinary issues. Patient has had no chemo in the last 30 days and no radiation in the last 90 days. His hypertension and diabetes are controlled with the current medication regimen. He denies pain and states his appetite is good. He has been medication and treatment compliant with no new medication orders since last visit (6/7/23). Patient has no history of smoking, alcohol, or recreational drug use. He resides in his residence with his wife, and both are currently retired. Patient is covered under Medicare insurance.</p> <p>ET outcome: Patient has a post-op appointment today with medical provider. WOC assessments and pouch change x2 completed with education provided on options for moisture control. Medical provider cauterized hypergranulation tissue at 12 o'clock position with Silver Nitrate, loosely packed shallow 2-3cm tunnel with Nu Gauze, and covered area with occlusive dressing. Medical provider cauterized hypergranulation tissue at 6 o'clock with no packing required.</p> <p>Patient brought his own supplies today.</p> <p>ET next scheduled visit: Patient to return to the clinic in approximately 3 weeks to be seen by NP.</p> <p>Medical History **Neurogenic bladder 1/20/22 **Adenocarcinoma of IPAA (in rectal cuff) 10/21/2021 treated with surgery, chemo, and radiation **Pouchitis 12/10/2020 **Complications of intestinal pouch **Ileostomy in place **Radiation cystitis **Urinary retention **Recurrent UTIs, complicated; with urosepsis and pyelonephritis **Diabetes Type 2 (controlled without complication) **Essential HTN **Ulcerative Colitis, chronic **Protein-Calorie Malnutrition, severe **Malnutrition, mild degree **Obesity, Class II, BMI 35-39.9 **GERD **Large Bowel Stricture</p>	<p>Pertinent lab results Patient had general chemistry, tumor markers, and blood counts collected early today. The following are abnormal results.</p> <p>Chloride 107 (96-106 mEq/L) BUN 28 (8-23 mg/dL) Creatinine 1.36 (0.7-1.35 mg/dL) Glucose 127 (70-99 mg/dL) eGFR 57 (≥ 60 mL/min/1.73m²) Platelet count 143 (150-400 ppm) Abs Lymph 0.72 (1.00-4.80 x10E3/uL)</p> <p>Pertinent Diagnostic Test Results Two biopsies obtained 10/11/22 from dense fibrous tissue; one from the presacral space and one from the left pelvic sidewall. One single cell in the first biopsy was atypical. The second biopsy was normal.</p> <p>Medications Amlodipine Diphenoxylate-atropine Ergocalciferol Escitalopram Ferrous Sulfate Glimepiride Oral Loperamide Therapeutic Multivitamin-Minerals plus iron Omeprazole Zinc Sulfate</p>

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<p> **Rectal Stricture **Anal Pain **Hypoalbuminemia **Thrombocytopenia **Iron Deficiency Anemia **Prostate Cancer **Chronic non-healing midline wound with exposed mesh **Chronic skin issues r/t urostomy, ileostomy, and non-healing wound **Obstructive Sleep Apnea using C-pap **Depression </p> <p> Surgical History **Local wound exploration with excision of mesh 5/5/2023 **Exploratory Laparotomy with lysis of extensive intra-loop adhesions, cystoprostatectomy & nodectomy with reciting of end ileostomy (L) and creation of end ileal conduit urinary diversion (R), TAP block, pelvic exploration with biopsies, and omental pedicle flap to fill pelvic dead space was performed 10/11/2022. **IPAA and intersphincteric excision 2021 **Sigmoidoscopy (stricture, enteritis) 5/10/2021 **Colostomy 2021 **Proctocolectomy 2021 **Ileostomy and J-Pouch 2021 **Sigmoidoscopy (stricture, pouchitis) 12/10/2020 **Gastric Sleeve Surgery 2011 **Dilation of anastomotic stricture with takedown 3/4/2003 **Hernia repairs with mesh 1/1/2003 **IPAA 12/10/2002 </p>	
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Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
<p>Wound</p> <p>Impaired wound healing secondary to hypergranulation, radiation, nutritional status, diabetes, altered oxygenation, and obesity.</p> <p>BMI 38.47</p> <p>Braden Scale score: 19 (no risk) (4) Sensory Perception; no impairment (1) Moisture; constantly moist (3) Activity; occasionally (4) Mobility; no limitations</p>	<p>Patient/caregiver to continue to monitor his skin for any changes and report any concerns to WOC nurse.</p> <p>Nutrition consult to optimize nutritional status r/t obesity and protein-calorie malnutrition.</p> <p>Diabetic Educator consult to manage diabetes.</p> <p>Patient will consume diabetic friendly</p>	<p>No new areas of skin breakdown or concern observed or reported.</p> <p>Patient verbalizes selecting lean dense proteins (fish, poultry) and low-fat dairy products for food choices. Patient verbalizes avoiding sweets and supplementing with protein shakes. 3-5x/week</p> <p>Labs: Albumin 4.3 (3.4-5.4 g/dL) Was 4.0 on 6/19/32 Protein, Total 7.4 (6-8 g/dL) Was 6.7 on 6/19/23</p>	<p>The Brand Scale includes 6 areas (sensory, moisture, activity, mobility, nutrition, friction/shear) and has been used extensively in home, long-term care, and acute care settings. It has an inter-rater reliability of 0.72-0.95 and includes food pattern intake and BMI (Ayello, 2023).</p> <p>Radiation interferes with wound healing for years after it is stopped due to persistent damage to vessels and proliferative cells (Netsch, 2022).</p>

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<p>(4) Nutrition; excellent (3) Friction and Shear: no apparent problem</p> <p>1. <u>Skin/Wound</u> **No pressure injuries **Non-healing midline surgical wound with hypergranulation tissue at proximal and distal ends. Proximal hypergranulation has shallow tunnel approximately 2-3cm deep. The remainder of the incision is healed.</p> <p><u>Related Lab Values</u> Chloride 107 (96-106 mEq/L) Was 103 on 6/19/23 Glucose 127 (70-100 mg/dL) Was 185 on 6/19/23 Protein, Total 7.4 (6-8 g/dL) Was 6.7 on 6/19/23 Albumin 4.3 (3.4-5.4 g/dL) Was 4.0 on 6/19/32 Iron n/a on 7/10/23 80 (60-170 mcg/dL) on 6/19/23 Platelet count 143 (150-450 ppm) Was 146 on 6/19/23 WBC 4.40 (4.0 to 11.0 × 10⁹/L) Was 5.05 6/19/23 Abs Lymph 0.72 (0.7-3.1 x10E3/uL) Was 0.63 on 6/19/23 Sodium 139 (135-145 mEq/L) Was 1138 on 6/19/23 Potassium 4.4 (3.5-5.5 mEq/L) Was 4.4 on 6/19/23 CEA 1.0 (0.0-2.9 ng/mL) Was n/a 6/19/23</p>	<p>protein supplement shake daily to increase caloric intake and aid in wound healing.</p> <p>Patient to wear c-pap as instructed by respiratory team and report any concerns immediately.</p> <p>Incision care: monitor wound for adverse changes such as s/s of infection (redness, warmth, tenderness, pain, WBC counts); drainage that increases, changes color (yellow, green), or is malodorous; any increased swelling or increased hypergranulation tissue. Patient will report to scheduled appointments until issues treatments are complete.</p> <p>An <u>alternative</u> for hypergranulation treatment is the topical steroid clobetasone butyrate 0.05% and use of less occlusive dressings (Ermer-Seltun & Rolstad, 2022).</p> <p><u>Alternative</u> to verbalization: Patient completes a one-week meal plan independently with information obtained from nutritional and diabetic consults and bring to next follow up appointment.</p>	<p>Labs: Glucose 127 (70-100 mg/dL) Was 185 on 6/19/23</p> <p>Patient states he is wearing his c-pap as ordered. Patient is able to verbalize adequate sleep health vs reduced feelings of restfulness and reduced daytime energy.</p> <p>Wound remains free of infection with continued decrease in size of hypergranulation tissue. WBC counts remain in normal range. Patient follows visit schedule. Patient able to verbalize s/s of infection, stating he will promptly call WOC clinic if any occur.</p> <p>Labs: WBC 4.40 (4.0 to 11.0 × 10⁹/L) Was 5.05 6/19/23</p>	<p>Protein is essential to wound healing because it contains nitrogen, it is a component of the immune system, and it provides binding materials for skin, cartilage, and muscle (Friedrich, et al, 2022).</p> <p>Diabetes impairs wound healing and regeneration at all phases of the healing process due to its adverse effects on angiogenesis, inflammation, increased risk for infection, and cell regulation and regeneration (Spampinato, et al, 2020).</p> <p>Micronutrients and macronutrients along with protein are needed to provide adequate calorie intake for proper wound healing (Netsch, 2022).</p> <p>Obesity, specifically adipose tissue, has a negative impact on wound healing due to its state of chronic inflammation, negative affect on angiogenesis, decreased production of nitric oxide, and poor oxygenation (Frasca & Strbo, 2022).</p> <p>Obese individuals need to consume adequate protein and calories to optimize wound healing because wound healing is dependent on nutrient supply (Friedrich, et al, 2022).</p> <p>Oxygenation is essential for wound healing. Oxygen is needed for fibroblasts to synthesize collagen which is necessary for the healing and integrity of wounds (Netsch, 2022).</p> <p>Infection can cause inhibition of wound healing, additional tissue damage, inflammation, toxins in the wound, a delay in collagen synthesis and epithelial resurfacing all of which will delay wound</p>
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			healing (Bietz, 2022). Hypergranulation prevents epithelial cells from migrating across the surface of the wound (Ermer-Seltun & Rolstad, 2022).
<p>Products (Wound)</p> <p>1. <u>Skin/Wound</u> Silver nitrate Nu Gauze ¼” packing strip Occlusive dressing.</p>	<p>1. <u>Skin/Wound</u> Silver nitrate applied by Medical Provider to both areas of hypergranulation tissue.</p> <p>Tunnel lightly packed with Nu Gauze ¼” packing strip and covered with occlusive dressing.</p> <p><u>Alternatives</u> to the silver nitrate: -timolol ophthalmic gel forming solution -topical corticosteroids Containing clobetasone butyrate 0.05%</p> <p>These are both non-invasive painless topical alternatives. (Emer-Seltun & Rolstad, 2022).</p> <p><u>Alternative</u> dressing: hydrofiber covered with a self-adherent semi-occlusive silicone foam dressing (R. B. Turnbull, Jr. MD School of WOC Nursing Education, 2022).</p>	<p>Wound care is effective AEB improved wound status (size, shape, drainage).</p> <p>Healing progresses, hypergranulation resolves, and the wound resolves.</p>	<p>Treatment of hypergranulation tissue includes dressings that are less occlusive or more absorbent, surgical excision, silver nitrate, hypertonic saline, timolol maleate ophthalmic gel, and laser ablation (Ermer-Seltun & Rolstad, 2022).</p> <p>Wounds with tunnel require a filler to lightly fill the empty space (Jaszarowski & Murphree, 2022).</p> <p>Epithelialization after using Timolol in refractory wounds was seen withing 9-14 days (Waldman, 2019).</p> <p>Topical steroids reduce inflammation which results in improved wound healing (Emer-Seltun & Rolstad, 2022).</p> <p>Repeated use of occlusive dressings is suggested as one of the predisposing factors to hypergranulation (Ermer-Seltun & Rolstad, 2022).</p>

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Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
<p>Ostomy Peristomal moisture-associated skin damage (PMASD) AEB denuded skin, pseudoverrucous lesions, and fungal rash.</p> <p><u>2A) End Ileal Conduit</u> **Diameter: 1 1/8" x 1 1/4" **Location: RUQ **Protrusion: Budded **Mucosal condition & color: red, moist **Mucocutaneous junction: intact **Peristomal skin: fungal rash along periphery of flange, otherwise clear and intact **Location of skin impairment: peristomal – periphery of flange **Peristomal contour: Rounded; depression at 3 o'clock, shallow transverse crease inferior to stoma near inferior edge of flange **Supportive tissue: soft **Character of output: clear yellow urine **Emptying frequency per day: at least 6 times per day **Midline abdominal incision as noted above.</p> <p><u>2B) End Ileostomy</u> **Diameter: 7/8" when rounded **Location: LUQ **Protrusion: protrudes slightly, buds with convexity **Mucosal condition & color: red, moist **Mucocutaneous junction: intact **Perisomal skin: Denuded and Pseudoverrucous **Location of skin impairment: narrow</p>	<p><u>2A) End Ileal Conduit</u> Consult with diabetic educator to plan one month of meals with a repeat serum glucose lab at the end of that 30-day meal plan.</p> <p>Dry wafer with hair dryer on cool setting after bathing/water sports. Ensure remaining pouching system is thoroughly towel dried.</p> <p>Monitor skin for fungal rashes in other areas such as skin folds and creases.</p> <p>Look at the back of the skin barrier for signs of leakage such as undermining and assess the extent of the rash with each pouch change. Report any worsening of rash to WOC nurse.</p> <p>Gently cleanse the affected area, dry the skin, and apply antifungal powder sealed with no-sting liquid skin barrier until rash resolves followed by application of no-sting liquid skin barrier. Be sure to dust off any excess powder.</p> <p>Fit the size of the wafer appropriately around the stoma, with no more than 1/16" to 1/8" gap between wafer and the stoma.</p> <p>Educate patient to avoid orange juice and grapefruit juice as they create an alkalotic urine.</p> <p><i>Alternative:</i> if rash does not resolve, refer patient to dermatologist.</p> <p><i>Alternative:</i> use Colly-Seal skin barrier.</p>	<p><u>2A) End Ileal Conduit</u> Serum glucose values will continue to trend downward into normal range. Labs: Glucose 127 (70-100 mg/dL) Was 185 on 6/19/23</p> <p>Fungal rash will resolve with no worsening of s/s.</p> <p>Skin folds and creases are free of fungal rash.</p> <p>Proper fit of pouching system will be achieved AEB no undermining or signs of pouch leaks.</p> <p>Proper adherence of pouching system will be achieved AEB no undermining or barrier discoloration, and resolution of fungal rash secondary to control of skin exposure to moisture and effluent.</p> <p>Peristomal skin will improve due to less contact with effluent while stoma remains free from injury/irritation.</p>	<p>The principal cause of PMASD is prolonged exposure to effluent, but other sources of moisture such as perspiration, swimming, hot tubs, etc., can contribute to PMASD (Salvadalea & Hanchett, 2022).</p> <p><u>2A) End Ileal Conduit</u> A meal plan created with a diabetic educator will help to maintain blood glucose levels WNL. Patients with diabetes mellitus are at higher risk of developing cutaneous candidiasis (Salvadalea & Hanchett, 2022).</p> <p>Fungal rashes start in moist areas. Moisture accumulates beneath skin barriers and taped borders after showers. By drying the pouching system, moisture against the skin is reduced (Salvadalea & Hanchett, 2022).</p> <p>Candidiasis may occur in other areas in patients who have peristomal candidiasis (Salvadalea & Hanchett, 2022).</p> <p>If the back of the pouch shows discoloration or undermining, this indicates a break in the seal (Colwell & Hudson, 2022).</p> <p>Treatment of peristomal candidiasis involves gently cleansing the affected area, drying the skin, and applying a topical antifungal agent (Salvadalea & Hanchett, 2022). Dust off the excess powder and Cover it with no-sting liquid skin barrier to allow the pouching system to adhere to the skin (Colwell & Hudson, 2022).</p> <p>By ensuring proper skin barrier opening, you provide a "leak-free fit" and by</p>

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<p>rim inferior to stoma **Peristomal contour: rounded **Supportive tissue: soft **Character of output: thick brown liquid effluent **Emptying frequency per day: at least 6 times per day</p> <p><u>Lab Values</u> Sodium 139 (135-145 mEq/L) Was 1138 on 6/19/23 Potassium 4.4 (3.5-5.5 mEq/L) Was 4.4 on 6/19/23 Chloride 107 (96-106 mEq/L) Was 103 on 6/19/23 Calcium 8.9 (8.6-10.3 mg/dL) Was 9.0 on 6/19/23 Glucose 127 (70-100 mg/dL) Was 185 on 6/19/23 Vitamin B12 n/a 7/10/23 Was 420 (200-900 pg/mL) on 6/19/23 CO2 22 (20-29 mmol/L) Was 23 6/19/23 CEA 1.0 (0.0-2.9 ng/mL) Was n/a 6/19/23</p>	<p>2B) <u>End Ileostomy</u> Patient to monitor output of ileostomy and report output over 1200mL in 24 hours to WOC nurse due to pertinent comorbid renal history.</p> <p>Patient will follow proper diet for ileostomy while increasing caloric intake to promote wound healing.</p> <p>Apply skin barrier powder sealed with liquid skin barrier to pseudoverrucous lesions and denuded skin before applying pouching system.</p> <p>The patient will use the push pull method of removal with adhesive remover when taking off the pouch.</p> <p>Fit the size of the wafer appropriately around the stoma, with no more than 1/16” to 1/8” gap between wafer and the stoma.</p> <p><i>Alternative:</i> refer patient to dermatologist for further evaluation.</p> <p><i>Alternative:</i> Apply an acetic acid soak for 20 minutes with each pouching change. Although these lesions are usually seen where there is urine, they can be seen (as with this patient) where there is stool.</p>	<p>2B) <u>End Ileostomy</u> Patient reports emptying his pouch 6+ times per day with an output of less than 1200mL per day.</p> <p>Labs: Sodium 139 (135-145 mEq/L) Was 1138 on 6/19/23 Potassium 4.4 (3.5-5.5 mEq/L) Was 4.4 on 6/19/23 Chloride 107 (96-106 mEq/L) Was 103 on 6/19/23 Calcium 8.9 (8.6-10.3 mg/dL) Was 9.0 on 6/19/23 CO2 22 (20-29 mmol/L) Was 23 6/19/23</p> <p>Patient verbalizes foods that can cause obstruction: (corn, nuts, Chinese vegetables, mushrooms, etc).</p> <p>Patient verbalizes correct steps for applying skin barrier powder with pouching system.</p> <p>No encrustations on stoma observed or reported.</p> <p>Patient verbally states proper method for push pull technique with adhesive remover.</p> <p>Pouch observed to be sized correctly prior to removal.</p>	<p>changing the pouching system frequently you prevent urine from pooling on the skin (Salvadalea & Hanchett, 2022)</p> <p>Fitting the wafer correctly, protects the skin from effluent (Colwell & Hudson, 2022)</p> <p>Alkalotic urine can lead to presence of grainy crystals on the stoma and skin which lead to pseudoverrucous lesions and cause UTIs (Salvadalea & Hanchett, 2022).</p> <p>Lower the pH of the urine by consuming cranberry juice/tablets, increasing fluid intake, and using an acidic skin barrier such as Colly-Seal (Salvadalea & Hanchett, 2022).</p> <p>Failure of skin to respond to usual care needs to be referred for further diagnostics (Salvadalea & Hanchett, 2022).</p> <p>2B) <u>End Ileostomy</u> Dehydration, electrolyte depletion, and renal failure can result when there is output greater than 1200mL in 24 hours (Stricker, et al, 2022). High output also exposes the skin to more effluent resulting in more skin irritation as sited in this discussion.</p> <p>Food blockages cause more edema and watery output, which causes more skin irritation (Carmel & Scardillo, 2022).</p> <p>Pseudoverrucous lesions occurring around the stoma result from skin irritation by prolonged exposure to urine or liquid stool, so by preventing contact</p>
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			<p>of effluent with the affected area, the condition resolves (Salvadaleña & Hanchett, 2022).</p> <p>Barrier powder will help absorb excess moisture and provide a dry surface to enhance sealing of the pouching system (Salvadaleña & Hanchett, 2022)</p> <p>A dry surface needs to be created because moisture from the denuded skin will break the pouch seal (Salvadaleña & Hanchett, 2022).</p> <p>Gentle removal of pouch system is imperative because moist skin can be further damaged due to adhesive related injuries (Salvadaleña & Hanchett, 2022).</p> <p>Appropriate sizing of opening in wafer optimizes fitting of the appliance so the exposure of skin to effluent is minimized and the fit around the stoma is not too tight or too loose (Salvadaleña & Hanchett, 2022).</p> <p>By ensuring proper skin barrier opening, you provide a “leak-free fit” and by changing the pouching system frequently you prevent effluent from pooling on the skin (Salvadaleña & Hanchett, 2022).</p> <p>If pseudoverrucous lesions do not resolve, patient will need referral for microbiology studies and skin culture (Salvadaleña & Hanchett, 2022).</p> <p>Applying an acetic acid soak made from a solution of diluted vinegar and water (30-50%) will create lower the pH of the area to impede more pseudoverrucous lesion formation (Salvadaleña & Hanchett, 2022).</p>
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<p>Products (Ostomy)</p> <p><u>2A) End Ileal Conduit</u> **Current pouching system: Coloplast SenSura Mio Deep Convex Urostomy pouch with 2 Hollihesive wedges at 3 o'clock, paste at pouch aperture, and paste at transverse crease. Patient using Cavilon 3M No Sting Skin Prep. **Current wear time: 3-4 days</p> <p><u>2B) End Ileostomy</u> **Current pouching system: Coloplast SenSura Mio Deep Convex Drainable pouch precut to 13/16" with a Coloplast 2.0mm Brava ring, paste around flange perimeter **Current wear time: 3-4 days</p>	<p><u>2A) End Ileal Conduit</u> **Recommendations: (other) add anti-fungal powder to skin care routine and continue with current pouching system.</p> <p><i>Alternatives:</i> For crease, include wedging or strip paste. Patient prefers tube paste. However, if fungal rash does not improve, different ways to reduce exposure to moisture will be needed. Brava ring and strip paste may be beneficial.</p> <p>Add a belt to the pouching system.</p> <p>Cauterizing pseudoverrucous lesions with silver nitrate as ordered by medical provider. Weekly applications may be needed for several weeks.</p> <p>Educate patient about when to empty pouch and how to use a nighttime drainage system.</p> <p><u>2B) End Ileostomy</u> **Recommendations: (pouching system) be sure to round the stoma when applying pouching system. Order number given for the ConvaTec Eakin Slim barrier ring which may help to better protect the patient's skin.</p> <p><i>Alternative:</i> Add a belt to pouching system. improve the seal of the pouching system (Salvadalea & Hanchett, 2022).</p>	<p><u>2A) End Ileal Conduit</u> Patient states he has Nystatin powder at home and verbalizes proper way to use with pouching system. Fungal rash resolves.</p> <p>Patient prefers paste with his urostomy pouch but verbalizes understanding of moisture/effluent exposure to current problems and is willing to change products if necessary.</p> <p>Wafer will show no signs of leakage/undermining when changed.</p> <p>Patient likes to use Cavilon 3M skin prep and verbalizes washing it off thoroughly between use.</p> <p>Patient reports for visits as scheduled to obtain care of the wound and stomas.</p> <p><u>2B) End Ileostomy</u> Patient verbalized proper steps to round stoma.</p> <p>Patient prefers to use paste around flange perimeter and transverse crease. However, he verbalizes understanding that if moisture is still an issue, other options need to be explored for skin-to-moisture barrier. He states he will use the information given to him to order Eakin rings and see how they work.</p>	<p><u>2A) End Ileal Conduit</u> Treatment of peristomal candidiasis involves use of a topical antifungal agent (Salvadalea & Hanchett, 2022).</p> <p>Effluent can track into skin folds/creases and dependent areas causing denuded skin (Salvadalea & Hanchett, 2022).</p> <p>Barrier rings enhance the seal of the pouching system (Colwell & Hudson, 2022). Barrier rings are moldable, able to form a seal over uneven surfaces, and protect skin from moisture (Salvadalea, et al, 2022)</p> <p>Add a belt to improve the seal of the pouching system (Salvadalea & Hanchett, 2022).</p> <p>It is helpful in controlling moisture in areas where there is a large amount of damage or high exudate to apply a thin hydrocolloid skin barrier before applying the pouch (Salvadalea & Hanchett, 2022).</p> <p>Silver nitrate may help the pouching system to seal better therefore keeping effluent away from lesions/stoma (Salvadalea & Hanchett, 2022).</p> <p>Empty the pouch when it is 1/3- 1/2 full (Carmel & Goldberg, 2022). This prevents effluent from sloshing on to the stoma.</p> <p>Connect the pouch to a nighttime drainage bag to keep the pouch empty and avoid urine from sloshing onto the skin (Salavadena & Hanchett, 2022).</p>
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			<p>2B) <i>End Ileostomy</i> When you round the stoma, you can ensure proper skin barrier opening around the base of the stoma. This enables you to provide a “leak-free fit” (Salvadaleña & Hanchett, 2022).</p> <p>Adding a belt to the pouching system will improve the seal (Salvadaleña & Hanchett, 2022). This will protect the lesions from moisture exposure, contributing to the healing process. Lesions will improve.</p>
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Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
<p>Continance</p> <p>Patient experienced neurogenic bladder secondary to radiation treatment for colon cancer. Patient experienced several hospital admissions for urinary tract infections with urosepsis and pyelonephritis secondary to incomplete emptying of the bladder.</p> <p><u>Lab Values</u> Chloride 107 (96-106 mEq/L) Was 103 on 6/19/23 BUN 28 (7-20 mg/dL) Was 21 on 6/19/23 Creatinine 1.36 (0.7-1.3 mg/dL) Was 1.39 on 6/19/23 eGFR 57 (> 60 ml/min/1.73 m²) Was 56 on 6/19/23 Sodium 139 (135-145 mEq/L) Was 1138 on 6/19/23 Potassium 4.4 (3.5-5.5 mEq/L) Was 4.4 on 6/19/23 Albumin 4.3 (3.4-5.4 g/dL) Was 4.0 on 6/19/32</p>	<p>Neurogenic bladder issues resulted in ileal conduit in RUQ via conversion of end ileostomy.</p> <p>Manage metabolic effects by maintaining routine check-ups.</p> <p>Keep urine acidic to minimize further UTIs (Carmel & Scardillo, 2022).</p> <p>Teach patient s/s of UTI: odor, discolored urine, back pain, fever, chills (Carmel & Scardillo, 2022).</p> <p>Educate patient on dietary considerations for a healthy urinary system.</p>	<p>Lab: Vitamin B12 n/a 7/10/23 Was 420 (200-900 pg/mL) on 6/19/23</p> <p>Patient keeps scheduled appointments with practitioners for follow up visits.</p> <p>Patient verbalizes ways to acidify urine.</p> <p>Patient verbally names s/s of UTI and is currently free of UTI.</p> <p>Patient discriminates between odor causing foods and malodorous urine due to an infection AEB naming foods that cause urinary odors.</p>	<p>Radiation treatment causes changes that result in fibrosis, disorganized muscle tissue, and necrosis to portions of the bladder, distal urinary sphincter, and pelvic floor muscles (Robinson, et al, 2022).</p> <p>Long term follow-up for patients with urinary diversions is usually recommended due to the possible complications associated with ileal conduits (Carmel & Scardillo, 2022).</p> <p>Ileal conduits can have a metabolic effect such as hyperchloremic metabolic acidosis, a risk for malabsorption syndromes such as Vitamin B12 deficiency, and risk for urinary calculi (Carmel & Scardillo, 2022).</p> <p>Vitamin B12 deficiency may take 2-5 years to become clinically apparent (Carmel & Scardillo, 2022).</p> <p>Acidic urine minimizes further UTIs (Carmel & Scardillo, 2022).</p> <p>s/s of UTI: odor, discolored urine, back pain, fever, chills (Carmel & Scardillo, 2022).</p> <p>Although there is no specific diet for people with urinary diversions, adequate fluid intake of 1500-2000mL/day is important. Unsweetened cranberry juice, cranberry capsules will keep urine more acidic, decreasing the risk of UTI and crystal formation. Avoid OJ and grapefruit juice because they cause alkaline urine. Foods that cause urine odor are fish, beer, broccoli, asparagus,</p>

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			<p>and antibiotics. Foods and medications can change the color of the urine, such as beets and food dye, medications (Carmel & Scardillo, 2022).</p>
<p>Pain Control</p> <p>Assess patient’s pain status at each visit and/or before performing any tasks.</p>	<p>Assess pain before changing dressing and/or pouching systems. Use a valid pain scale (0-10 Numeric Rating Scale).</p> <p>Educate patient on the importance of pain management and reporting pain that is severe, recurrent and persistent.</p> <p><i>Alternatives if pain is present:</i> <i>Atraumatic dressings/Topical measures:</i> -moisture retentive dressings -low adhesive/non-adhesive dressings -protection of peri wound skin -educate about topical anesthetics</p> <p><i>Adjunctive therapies:</i> -diversional activities -call a time out</p> <p><i>Medications:</i> -follow World Health Organization’s (WHO) three step pain management model</p>	<p>Patient rates pain as “0” and states that he does not take anything for pain at home either.</p> <p>Patient agrees to manage pain and report pain that is severe, recurrent and persistent.</p>	<p>Pain causes poor wound healing due to the stress response activating sympathetic activity and vasoconstriction leading to ischemia (Ermer-Seltun & Rolstad, 2022).</p> <p>According to Ermer-Seltun & Rolstad, 2022, moisture retentive dressings may reduce the number of dressing changes; low/non-adhesive dressings such as silicone or gel, do not adhere to wound beds making removal less painful; skin protectants for the skin (liquid, ointments) protect the skin from maceration and adhesive related injuries.</p> <p>Topical anesthetics lack research and can be absorbed systemically as well as needing to be put on several times a day. These agents are not widely used in clinical settings and the patient should be educated on the best options for pain control if he develops a need for it (Ermer-Seltun & Rolstad, 2022).</p> <p>Diversional activities such as relaxation activities, imagery, or music can reduce wound-related pain (Ermer-Seltun Rolstad, 2022). Calling a time out will allow for effective pain interventions.</p> <p>The WHO provides guidelines to start with the lowest, yet most effective, pain control in the least invasive way and titrate up based on the level of pain until pain is controlled (Ermer-Seltun & Rolstad, 2022).</p>

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