Student name and date: Michele Ramirez 02/17/2024

Instructor Signature/Date:

1. **Define constipation and address its clinical management.**

Constipation is a common gastrointestinal condition characterized by infrequent bowel movements or difficulty passing stools. This can be caused by various factors, including inadequate fiber intake, lack of physical activity, dehydration, certain medications, hormonal imbalances, and underlying medical conditions.

Clinical management of constipation involves several approaches, including:

- Lifestyle modifications: encouraging regular exercise, increasing fiber intake, and drinking adequate water can help promote bowel regularity.
- Dietary changes: consuming a diet rich in high-fiber foods like fruits, vegetables, whole grains, and legumes can add bulk to the stool and facilitate easier passage.
- I recommend over-the-counter stool softeners or laxatives when appropriate.
- Encouraging patients to adopt healthy bowel habits such as establishing a regular bowel routine.
- Provide education on proper toileting posture and techniques to help facilitate bowel movements.
- Review the patient's medical history and medications to identify any potential causes of constipation. For example, certain medications such as opioids can cause constipation.
- Monitoring patients for signs of complications such as fecal impaction, bowel obstruction, or rectal bleeding and providing prompt intervention as needed.

2. **You are asked to see a male patient with marked and extensive incontinence-associated dermatitis. On assessment you see marked erythema with wet and weepy dermatitis in the perianal and sacral skin. The patient has a recent history of acute CVA affecting the left side of his body complicated by pneumonia and a UTI, and is currently recovering in a long-term acute care facility. Swallow tests for this individual have demonstrated difficulty swallowing; a temporary gastrostomy tube is in place for feedings until oral feedings can safely resume. Diarrhea episodes began a week ago involving 5-6 episodes of liquid stool daily. A Foley catheter is in place with leakage of urine around the catheter.**

a. **What will your focused assessment consist of**?

For the patient with marked and extensive incontinence-associated dermatitis, the focused assessment should include the following:

- Skin assessment: assess the extent and severity of the dermatitis. Look for signs of erythema, maceration, excoriation, weeping, or open wounds in the perianal and sacral areas. Note the presence of any odor or discharge.
- Incontinence Assessment: Evaluate the type and frequency of incontinence episodes (urinary and fecal) and document their impact on the patient's quality of life and activities of daily living.
- Gastrointestinal assessment: assess the patient's bowel habits, including the frequency, consistency, and stool volume. Determine if there have been any recent changes, such as diarrhea episodes and associated symptoms like abdominal pain or bloating.
- Urinary assessment: evaluate the patient's urinary status, including the presence of urinary leakage around the Foley catheter. Assess the color, odor, and volume of urine and inquire about any urinary symptoms such as urgency, frequency
- Nutritional assessment: review the patient's current feeding method (temporary gastrostomy tube in this case) and evaluate their nutritional status and hydration. Inquire about the presence of any difficulty swallowing or changes in appetite.

b. How will you approach the issue of urinary incontinence on a long-term basis?

Implement strategies to optimize bladder management for the long term. This may include:

- Ensuring the Foley catheter is placed correctly and secured to minimize urine leakage.
- Regular catheter monitoring for blockage, infection, or other complications.
- Addressing any issues with the Foley catheter, such as its size, type, or appropriate drainage system.
- Implementing a proper catheter care protocol to prevent urinary tract infections and other complications.
- Regular bladder assessments to ensure the catheter remains the most appropriate option for urinary management.

Explore the possibility of implementing bladder training techniques and pelvic floor muscle exercises to improve bladder control and reduce urinary incontinence episodes. This may involve gradually increasing the time between catheterizations or scheduled voiding. Encouraging the patient to engage in pelvic floor muscle exercises if feasible and safe for their condition.

c. **What initial and ongoing urodynamic testing can be used to track the progress of regular and consistent bladder emptying progress with the patient?**

The patient has marked incontinence-associated dermatitis and is experiencing urinary incontinence with leakage around the Foley catheter. To track the progress of regular and consistent bladder emptying with minimal breakthrough leakage, the following urodynamic testing can be considered:

- Uroflowmetry: Uroflowmetry measures the rate and volume of urine flow during voiding. It helps assess the flow pattern and can provide information about the bladder's ability to empty correctly. Regular uroflowmetry tests can track changes in urinary flow over time and evaluate improvements in bladder emptying.
- Post-void residual volume (PVR) measurement determines the amount of urine remaining in the bladder after voiding. It can be measured using methods such as ultrasound or catheterization. Regular monitoring of PVR helps determine if the bladder is emptying adequately and can identify any retention issues that may contribute to breakthrough leakage.
- Pressure-Flow Study: a pressure-flow study combines urodynamic measurements of bladder pressure and urine flow rate. It helps evaluate bladder outlet obstruction and detrusor muscle function. It can be used to assess bladder dynamics changes and identify abnormalities that may contribute to breakthrough leakage.

d. How will you approach the issue of fecal incontinence for this person? Will you need to use containment devices? If so, what kind?

Develop an individualized bowel management program for the patient. This may involve establishing a routine for bowel movements, including scheduled toileting attempts, the use of appropriate assistive devices, and techniques such as abdominal massage or digital stimulation.
Containment devices may be considered depending on the severity and frequency of fecal incontinence. These devices provide a barrier and protect the skin from further damage. Options include absorbent briefs, protective pads or sheets, or fecal management systems such as rectal pouches. The choice of device will depend on the patient's needs and comfort.

e. What skin care measures will be needed to correct this problem?

To address the marked and extensive incontinence-associated dermatitis in the patient's perianal and sacral skin, the following skin care measures may be needed to correct the problem. Cleanse the affected area using a mild cleanser or a no-rinse cleanser. Avoid using soap, hot water, or harsh scrubbing, as these can further irritate the skin. Apply a moisture barrier cream or ointment to protect the skin from further moisture exposure. Barrier products containing ingredients like zinc oxide or dimethicone can help form a protective layer and promote healing. Consider using a barrier film spray or wipe to protect the perianal and sacral areas. These films can act as a barrier between the skin and irritants.
Use foam dressings on bony prominences, such as the sacrum, to minimize pressure and friction on the skin. Regular repositioning of the patient to relieve pressure on vulnerable areas. Changing positions every two hours can help prevent further skin breakdown. Ensure the patient is receiving adequate nutrition and hydration through the gastrostomy tube. Proper nutrition supports overall skin health and can enhance the healing process.

3. A female patient reports she has had progressively worsening urine leakage for the last three years. She is a type II diabetic and has three grown children. The pattern of incontinence includes symptoms of stress and urgency. Given her medical history and symptoms, what type of medical management might be helpful to her? What behavioral strategies can you recommend that may reduce the incontinence episodes? Any additional recommendations?

Based on the symptoms and medical history of the patient, it is possible that she is suffering from mixed urinary incontinence, which is characterized by symptoms of both stress and urgency incontinence. Medical management options may include medications such as antimuscarinics, beta-agonists, and pelvic floor muscle exercises, which can help strengthen the muscles that control urination. In addition to medical management, there are also behavioral strategies that may help reduce incontinence episodes. These may include dietary modifications, such as reducing caffeine and alcohol intake, and bladder training exercises, which involve gradually increasing the time between bathroom trips to help retrain the bladder. It may also be helpful for the patient to keep a bladder diary, which can help identify patterns of incontinence and potential triggers, as well as to practice good hygiene and wear absorbent pads or underwear to manage any leakage. Finally, given the patient's medical history, it may be important to ensure that her blood sugar levels are well controlled, as uncontrolled diabetes can exacerbate urinary incontinence.

4. You are teaching a group of CNAs how to apply an external (condom) catheter. What should be included in this education? How will you evaluate their understanding of what has been taught?

When teaching CNAs how to apply an external (condom) catheter, it is important to cover the following topics:

- Anatomy and physiology of the male urinary system
- Indications for the use of an external catheter
- Contraindications for the use of an external catheter
- Types of external catheters available and their differences
- Proper technique for applying an external catheter
- Care and maintenance of the external catheter
- Signs and symptoms of complications or adverse reactions to evaluate their understanding of what has been taught, I would use several methods such as:
- Demonstration: Ask them to show me step-by-step instructions on how to apply the external catheter while I observe and provide feedback.
- Verbal explanation: Ask them to verbally explain the key steps in applying the external catheter.
- Written assessment: providing a written exam with multiple choice or short answer questions to assess their knowledge of the topic

By using these methods, I can ensure that the CNAs thoroughly understand how to apply an external catheter and can perform the procedure safely and effectively on their own.

5. A 76-year-old woman presents with a history of chronic constipation with fecal impaction and leakage of liquid stool. On assessment she denies any sensation of rectal fullness; her anal wink is intact, and her sphincter tone is normal with good voluntary contractility. She eats mostly starches, dairy products, and meats. She does not eat fruits and vegetables because they bother her stomach. She has used OTC laxatives to induce bowel movements with increasing frequency over the last few years. She reports current use of laxatives as being once a week and frequency of bowel movements as one or twice a week "with straining." The leakage began just this week, and she is very upset about it. She says she will "do whatever you recommend" to get her bowels working right again.
What are your recommendations?

Based on the symptoms and history provided, it appears that the patient is suffering from chronic constipation, fecal impaction, and leakage of liquid stool. In such cases, addressing the underlying cause of constipation and providing measures to relieve the symptoms is essential. The patient should make some dietary changes, such as increasing her fiber-rich foods like fruits, vegetables, and whole grains. She should also drink plenty of water to soften the stool and make bowel movements easier. She may also benefit from a stool softener or a gentle laxative, such as lactulose or psyllium, as prescribed. In addition, she should be encouraged to establish a regular bowel routine and not to ignore the urge to have a bowel movement. She may also benefit from pelvic floor muscle exercises to improve muscle tone and control. The patient can be referred to a gastroenterologist for further testing such as a colonoscopy or medication.

6. The following prompts relate to quality improvement projects and CAUTI:

a.) Describe the components of a quality improvement project.

A quality improvement project typically consists of several components, including:

- Problem identification, which involves identifying the problem or issue that needs to be addressed through the quality improvement project.
- Data collection: collecting relevant data to help understand the problem and identify potential solutions.
- Root cause analysis: identifying the underlying causes of the problem or issue.
- Solution development involves developing potential solutions to address the problem or issue.
- Implementation: implementing the chosen solutions to address the problem or issue.
- Monitoring and evaluation: monitoring the implementation of the solutions and evaluating their effectiveness in addressing the problem or issue.
- Sustaining the change: ensuring that the changes made through the quality improvement project are sustained over time and become part of the organization's standard processes and procedures.

b.) Identify and describe how you would design a QI project using CAUTI as the subject.

To design a quality improvement (QI) project for Catheter-Associated Urinary Tract Infections (CAUTI), the following steps can be followed:

- Define the problem: the first step is to understand the problem of CAUTI and how it impacts patient outcomes. This can be done by reviewing the literature, analyzing data, and discussing healthcare outcomes.
- Develop a team: a team of healthcare providers (e.g., physicians, nurses, infection preventionists, etc.) should be assembled to work on the project.
- Set goals and objectives: the next step is to set specific, measurable, achievable, relevant, and time-bound (SMART) goals and objectives for the project.
- Develop interventions: based on the goals and objectives, interventions should be developed to reduce the incidence of CAUTI. Examples of interventions include educating healthcare providers on proper catheter insertion and maintenance, using alternative methods to catheterization, and implementing catheter removal protocols.
- Implement interventions: once the interventions have been developed, they should be implemented in a phased manner to ensure their effectiveness.
- Collect data: data should be collected before and after implementing the interventions to determine their impact on CAUTI rates.
- Analyze data: the data should be analyzed to determine the effectiveness of the interventions.
- Share results: the results of the QI project should be shared with the healthcare team, stakeholders, and patients to ensure transparency and encourage ongoing improvement.
- Continuous improvement: the QI project should be an ongoing process, with constant improvement being made based on feedback and results.

By following these steps, a QI project can be designed that effectively addresses the problem of CAUTI and improves patient outcomes.

7. Mr. J.L. had an indwelling catheter placed for urinary retention secondary to an enlarged prostate. He is started on Finasteride (Proscar), 5 mg once a day to decrease the size of his prostate. Mr. J. L. visits the urologist for a 2-month follow-up for the removal of his indwelling catheter and a voiding trial. Explain the purpose of a voiding trial and how you will conduct it.

The purpose of a voiding trial is to evaluate a patient's ability to urinate after removing an indwelling catheter. It involves measuring the amount of urine produced and assessing the patient's ability to empty their bladder fully. As the WOC nurse, I will conduct the voiding trial by monitoring the patient's urinary output and bladder function during the trial. I will measure the amount of urine produced and evaluate the patient's ability to urinate without difficulty or discomfort. A bladder scan can be performed to determine if the patient has residual urine after voiding. I would further recommend further interventions, such as intermittent catheterization or the use of medications to help improve bladder function. The ultimate goal of the voiding trial is to ensure that the patient can urinate normally and comfortably without needing an indwelling catheter.

8. The PVR is 425 cc, and the urologist orders clean intermittent catheterization rather than indwelling catheter use. The Finasteride is continued.

a. State the goal of intermittent self-catheterization.

The goal of intermittent self-catheterization is to empty the bladder entirely while avoiding the risks associated with the long-term use of an indwelling catheter. This method involves inserting a catheter into the bladder through the urethra at regular intervals to drain urine and prevent the build-up of urine in the bladder. It can help prevent urinary tract infections, bladder damage, and other complications associated with urinary retention.

b. Describe education points to include for an individual performing self-catheterization.

- First, the individual should wash their hands with soap and water and set up a clean workspace.
- Explain the importance of lubricating the catheter to reduce discomfort and the risk of injury to the urethra.
- Demonstrate the proper technique for inserting the catheter, including how to hold the catheter, how far to insert it, and how to advance it if necessary.
- Emphasize the importance of maintaining a sterile environment during the procedure to prevent infections.
- Teach the individual to recognize signs of infection, such as fever, chills, and pain.
- Explain the importance of following the recommended catheterization schedule and not skipping or delaying catheterizations.
- Review proper catheter disposal and hand hygiene after the procedure.
- Finally, encourage the individual to contact their healthcare provider or WOC nurse if they experience any problems or have questions.

c. Identify at least three complications that can occur with intermittent self-catheterization.

Complications that can occur with intermittent self-catheterization include urinary tract infections, urethral trauma or damage, and bladder spasms. Other potential complications may include bleeding, difficulty inserting the catheter, and discomfort or pain during the procedure. Following proper catheterization techniques and seeking medical attention if any complications arise is essential.

d. Describe the action of Finasteride (Proscar) and any other teaching points, such as side effects.

Finasteride, also known as Proscar, is a medication used to treat symptoms of benign prostatic hyperplasia (BPH) in men. It works by inhibiting the conversion of testosterone to dihydrotestosterone (DHT), a hormone that contributes to the growth

of the prostate gland. By reducing DHT levels, finasteride can help shrink the prostate gland and relieve symptoms such as difficulty urinating and decreased urine flow.

Some common side effects of finasteride include decreased libido, erectile dysfunction, and decreased semen volume. These side effects are usually reversible once the medication is discontinued. Less commonly, finasteride may cause allergic reactions, breast tenderness or enlargement, or depression. It is essential to take finasteride as directed by your healthcare provider and to report any side effects or changes in symptoms. Finasteride should not be taken by women or children, and men taking finasteride should use caution when handling crushed or broken tablets as the medication can be absorbed through the skin.

9. Mr. P.V., 26 years old, has a neurogenic bladder secondary to an accident 3 years ago. He has been managed with an indwelling catheter (ISC was not workable for him secondary to ureteric reflux), is in a wheelchair bound, and sexually active. He is finding intercourse uncomfortable secondary to the indwelling catheter and has discussed insertion of a suprapubic catheter with the urologist. Suprapubic tube (SP) insertion is scheduled for next week.

a. What should be included in the pre-operative teaching of suprapubic catheter insertion?

Pre-operative teaching for suprapubic catheter (SP) insertion should cover several essential aspects to ensure the patient is well-prepared and informed.

- Explain why the suprapubic catheter is being recommended and the benefits it offers compared to the current indwelling catheter, such as reduced discomfort during intercourse and potentially decreased risk of urinary tract infections.
- Describe the SP insertion procedure, including how the catheter will be inserted through the abdominal wall into the bladder, and that it will be secured in place with a stabilizing device.
- Discuss potential risks and complications associated with SP insertion, such as bleeding, infection, bladder injury, or catheter blockage.
- Provide instructions on any per-operative preparations required, such as fasting before the procedure or specific hygiene measures.
- Explain the type of anesthesia that will be used during the procedure, whether it is local anesthesia or general anesthesia, and discuss any associated risks.
- Outline what to expect immediately after the procedure, including monitoring for any signs of complications, and provide guidance on caring for the insertion site and catheter after discharge.
- Advise the patient on any limitations or activity restrictions following the procedure, such as avoiding heavy lifting or strenuous activities that could strain the insertion site.
- Discuss any medications that may be prescribed after the procedure, such as pain relievers or antibiotics, and provide instructions on how to take them.
- Schedule follow-up appointments with the urologist to monitor the insertion site, assess catheter function and address any concerns or complications that may arise.

- Encourage the patient to ask any questions or express any concerns that may have about the procedure, recovery, or long-term management with the suprapubic catheter.

By addressing these topics thoroughly, you can help ensure the patient feels informed and prepared for their suprapubic catheter insertion.

b. Discuss care of the suprapubic tube post-operatively including cleansing, dressing, securing of the catheter, changing of catheter, etc.

Post-operative care of a suprapubic catheter (SP) is crucial to prevent complications and ensure the patient's comfort and well-being.

- Cleanse the area around the insertion site daily with mild soap and water. Gently pat the area dry with a clean towel. Avoid using harsh or perfumed products that could irritate the skin.
- The insertion site may be covered with a sterile dressing initially. It's essential to change the dressing regularly, as it can become soiled and increase the risk of infection. If no dressing is applied, monitor the insertion site regularly for signs of infection or irritation.
- Ensure the catheter is securely anchored to prevent movement and minimize the risk of displacement. Use a catheter stabilization device or secure the catheter with medical tape, taking care not to apply excessive pressure or tension on the catheter.
- Catheter changes may be necessary periodically to maintain catheter patency and prevent infection. The frequency of catheter changes will depend on the type of catheter and the patient's individual needs.
- Regularly flush the catheter with sterile saline or prescribed catheter irrigation solution to maintain catheter patency and prevent blockages.
- Keep an eye out for signs of complications such as infection, leakage around the catheter site, bladder spasms, or changes in urine output or appearance. Report any signs or symptoms promptly.
- Pay attention to the skin around the catheter insertion site and the area where the catheter exits the body. Keep the skin clean and dry, and apply a barrier cream or ointment as needed to protect the skin from irritation or breakdown.
- Encourage the patient to maintain good hand hygiene practices, including regular handwashing before and after handling the catheter or drainage bag, and keeping the catheter and drainage system clean.
- Schedule regular follow-up appointments to monitor the catheter site, assess catheter function, and address any concerns or complications that may arise.

By following these guidelines for post-operative care, you can help ensure the safe and effective management of a suprapubic catheter and promote the patient's overall comfort and well-being.