BNURS506 Quiz Answering

Term: Spring 2025
Module 5: Digestive & Reproductive
Name: Student F

#:	Your Answer	Feedback from Grader	Score
2	**1. Identify 3 things you can do to promote an environment of inclusivity, respect, and dignity for Kiry during this visit. (6 points)** Healthcare workers, managers, and health service leaders need to continually strive for more inclusive practices. Diversity, equity, inclusion, intersectionality, and a strength-based approach are the five underpinning concepts and drivers to reducing health inequities faced by marginalized populations where these arise from barriers to accessing healthcare. Inclusivity is well-aligned with patient-/person-centered care, and should be incorporated into all aspects of healthcare services and organizations. (Marjadi et al., 2023) In the given scenario: (1) I would use an inclusive language by addressing my patient by their preferred name (Kiry) and pronoun (they/them) a sign of respect to their power of self-identification (2) I would ensure appropriate communication method such as language-/culturally-specific written information, audio channels for those with low literacy in their mother tongue, cultural/language-specific training for staff members, and publicly funded interpreting services. Culturally responsive communication is a cornerstone of person-centered care, and is inclusive of linguistic, cultural, racial, ethnic, religious, and sexual diversity (Marjadi et al., 2023). (3) I would ensure inclusivity in physical spaces by providing a healthcare environment which accommodate a full range of diversity and address Kiry's various physical, sensory, and cognitive needs, as appropriate to improve their patient experience. **2. During the exam, the provider notes white, thick, cottage cheese-like discharge and vulvar erythema. What diagnosis do you anticipate based on these symptoms? (2 points)**	Thank you for your answer and feedback. 1. The first thing you identified is a great step to take in ensuring an environment of respect. The second two items are too vague. I was looking for very specific measures you could take as the nurse. Examples include introducing yourself using your pronouns, using only surnames in the waiting room, correct anyone who misgenders or dead names the patient, take an organ survey to ensure holistic care, have a patient centered conversation about the steps of the exam and assess for any comfort measures required, ensure permission is asked before the patient is touched, etc. 2 points 2. Correct 2 points 3. Correct - consider oral meds 2 points	6 / 10

	The likely diagnosis based on these clinical manifestations is Vulvovaginal Candidiasis (VVC). VVC usually is caused by Candida albicans but can occasionally be caused by other Candida species or yeasts. Typical symptoms of VVC include pruritus, vaginal soreness, dyspareunia, external dysuria, and abnormal vaginal discharge (Centers for Disease Control and Prevention [CDC], 2021) **3. The provider prescribes miconazole due to its low expense and availability over the counter. The provider instructs Kiry on how to apply the cream. While the provider is talking, you see Kiry grimace and struggle with tears. Regarding medication, what could you discuss with Kiry regarding their options? (2 points)** I would acknowledge Kiry's distress, but would initially want to explore more the reasons behind the tears so that I can better provide suitable alternatives or options for them. I would emphasize that Kiry has autonomy over their care and we are here to help them protect that right. If the topical cream bothers them. I would initially provide education below and if they still do not prefer the cream, I would offer the use of oral agent instead. Topical agents usually cause no systemic side effects, although local burning or irritation might occur. Oral azoles occasionally cause nausea, abdominal pain, and headache. Therapy with the oral azoles has rarely been associated with abnormal elevations of liver enzymes. Clinically important interactions can occur when oral azoles are administered with other drugs (CDC, 2021). References: Centers for Disease Control and Prevention. (2021). Sexually Transmitted Infections Treatment Guidelines, 2021 Vulvovaginal Candidiasis (VVC). https://www.cdc.gov/std/treatment-guidelines/candidiasis.htm. https://www.cdc.gov		

	Marjadi, B., Flavel, J., Baker, K., Glenister, K., Morns, M., Triantafyllou, M., Strauss, P., Wolff, B., Procter, A. M., Mengesha, Z., Walsberger, S., Qiao, X., & Gardiner, P. A. (2023). Twelve Tips for Inclusive Practice in Healthcare Settings. *International journal of environmental research and public health*, *20*(5), 4657. https://doi.org/10.3390/ijerph20054657 Feedback: I like how the scenario and questions stemmed with emphasis on diversity, equity and inclusion. It's easy to say that we are DEI conscious but it's hard to translate it into practice. Since we are so accustomed to using the he and she pronouns, we unconsciously and unintentional use these instead of our patient's preferred pronouns. Great question and scenario.		
4	**1. What is the most likely diagnosis? Why? (hint: include risk factors and symptoms)** Quinn's likely diagnosis is endometriosis. Endometriosis is a chronic gynecologic disease characterized by the development and presence of histological elements like endometrial glands and stroma in anatomical positions and organs outside the uterine cavity. The main clinical manifestations of the disease are chronic pelvic pain and impaired fertility. The localization of endometriosis lesions can vary, with the most commonly involved focus of the disease being the ovaries, followed by the posterior broad ligament, the anterior cul-de-sac, the posterior cul-de-sac, and the uterosacral ligament (Tsamantioti & Mahdy, 2023) According to the World Health Organization [WHO] (2023) endometriosis often causes severe pain in the pelvis, especially during menstrual periods. Some people also have pain during sex or when using the bathroom. Some people have trouble getting pregnant. Some people with endometriosis don't have any symptoms. For those who do, a common symptom is pain in the lower part of the belly (pelvis). Pain may be most noticeable: during a period, during or after sex, when urinating or defecating. Some people also experience: chronic pelvic pain, heavy, bleeding during periods or between	1. You correctly identified that Quinn likely has endometriosis! I appreciate that you gave a thorough explanation of the symptoms and risk factors. I was looking for the s/s and risk factors that Quinn specifically had but I will still give full credit for your hard work! (3/3 pts) 2. Awesome! Laparoscopy is the definitive diagnostic for endometriosis. They usually do a biopsy to look at the histology to confirm. (3/3 pts) 3. Great job at mentioning several different treatments for endometriosis. NSAIDs with continuous hormonal contraceptives are first line treatment. Thank you for including Danazol as a medication option as I did not	10 / 10

	periods, trouble getting pregnant, bloating or nausea, fatigue, depression or anxiety. Cleveland Clinic (2025) identified some of the risk factors can place a person at a higher risk of developing endometriosis, includes: biological family history of endometriosis, having short menstrual cycles (fewer than 27 days between periods), having long and heavy periods (periods last longer than eight days) and never having children. **2. What is one of the diagnostic approaches that would help support suspicion or confirm the diagnosis? (State one method and a sentence on what it looks for)** The only way to definitively diagnose endometriosis is with a laparoscopy. This procedure involves your healthcare provider using a small camera (laparoscope) to look inside your pelvis. Once they see where the tissue is, they can remove a sample of tissue (biopsy) and send it to a lab for testing. The surgeon will also try to remove or destroy all tissue that is suspicious of endometriosis that they find during this procedure. In this way, a laparoscopy helps with diagnosis and treatment (Cleveland Clinic, 2025). **3. What two pieces of education could you provide the patient regarding management? (Answers can include pharmacological interventions, surgical interventions, or supportive resources. Give 1-2 sentences on when and why each intervention is used)** 1. Medications According to Cleveland Clinic (2025) medications can help manage the symptoms of endometriosis. Over-the-counter nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen can be helpful with pain. Hormonal therapies are another option. They can help with pain and with suppressing menstrual cycle. Hormonal options for endometriosis can include:	have this in my own key answer. Great work! Surgery such as laparoscopy with excisions or hysterectomy is usually reserved for severe cases. +1 pt for citation Thank you for the feedback! It's unfortunate that endometriosis is underdiagnosed due to the stigma surround female reproductive health.	

	1. Birth control. Hormonal birth control can come as combination therapy (estrogen and progestin) or progestin-only options. These come in multiple forms, including oral birth control pills, patch, vaginal ring, birth control shot, implant or IUD. This treatment often helps people have lighter, less painful periods. 2. Gonadotropin-releasing hormone (GnRH) antagonists or agonists. This medication stops the hormones that cause your menstrual cycle. This basically puts your reproductive system on hold as a way to relieve your pain. 3. Danazol (Danocrine) is another form of hormonal medication that stops the production of the hormones that cause you to have a period. While taking this medication for endometriosis symptoms, you may have the occasional menstrual period, or they might stop entirely. With all of these medications, it's important to note that your symptoms can come back if you stop taking the medication. Providers don't recommend these medications during pregnancy or if you're actively attempting to achieve pregnancy. Talk to your healthcare provider about the pros and cons of each medication before starting (Cleveland Clinic, 2025). 2. Surgery Surgical options to treat endometriosis according to Cleveland Clinic (2025) includes the following: 1. Laparoscopic surgery. In this procedure, your surgeon will make a small cut in your abdomen and insert a thin tube-like tool called a laparoscope into your body. The laparoscope can see inside your body and identify endometriosis with a high-definition camera. Your surgeon can insert additional surgical instruments to remove the problematic tissue. 2. Hysterectomy. In severe cases, your surgeon may suggest removing your uterus and/or ovaries.		

	References: Cleveland Clinic. (2025). *Endometriosis.* https://my.clevelandclinic.org/health/diseases/10857-endometriosis. https://my.clevelandclinic.org Tsamantioti, E. & Mahdy, H. (2023). *Endometriosis.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK567777/ World Health Organization. (2023). *Endometriosis.* https://www.who.int/news-room/fact-sheets/detail/endometriosis. https://www.who Feedback: I remember my sister having really bad dysmenorrhea when we were growing up. I could not imagine having pain that is unresolved of OTC pain meds. I learned a lot about endometriosis through these questions and scenario.		
6	**What is a TPE, and why is it a curative option? (2-3 sentences is sufficient)** Total pelvic exenteration (TPE) is an exenterative operation for advanced tumors and involves en bloc resection of the rectum, bladder, and internal genital organs (prostate/seminal vesicles or uterus, ovaries and/or vagina) (Ferenschild et al., 2008). Total pelvic exenteration (TPE) is reserved for patients with recurrent gynecologic, bladder or rectal cancer who have already undergone surgery, chemotherapy and radiation. As a curative option, it is a life-altering operation, but with overall good success in curing patients and getting them back to normal life (Cleveland Clinic, 2018). Pelvic exenteration is performed as a palliative or **curative option** for patients with recurrent or locally invasive pelvic cancer. Pelvic exenteration allows patients with significant tumor burden an option for improved quality of life, even though the morbidity of the procedure is high. A complete	Wonderful job answering this question! You went above and beyond my expectations, providing a substantial amount of information and demonstrating an understanding of this topic. For the first question, a brief way to summarize your points about why a TPE is curative is to mention how the patient's cancer can be completely resected while removing multiple organs in the pelvic cavity, creating adequate margins.	10/ 10

	pelvic exenteration involves resection of the distal sigmoid colon, rectum, and anus along with the bladder, seminal vesicles, prostate, and urethra in males or the uterus, ovaries, vagina, bladder, and urethra in females (Grimes, W., Dunton, C. & Stratton M., 2024). **What organs/anatomical body parts are involved in this surgery (name at least 5)?** Total pelvic exenteration (TPE) is an extensive cancer-removal operation that involves removal of most or all the pelvic viscera — **bladder, uterus, cervix, vagina, rectum, anus and external genitalia** (Cleveland Clinic, 2018). **What are some postoperative and patient care considerations involved with this surgery? Hint: Please consider topics such as mental health, drains/ostomies, infection, etcetera. Name and briefly discuss at least 3 considerations.** 1. Addressing the physical and psychological aftermaths of surgery are critical to patient quality of life going forward. Sexual function in particular is a crucial topic that surgeons often don't address and that patients may be reluctant to mention (Cleveland Clinic, 2018). 2. Following surgery, the patient should be transferred to the intensive care unit (ICU) for initial post-operative care. In general, patients who have had exenterations completed within 10 hours are likely extubatable, while patients whose surgery is more prolonged may need continued intubation and ventilation (Ng & Lee, 2021). 3. Aggressive fluid and blood product replacement with correction of coagulopathy may be required. Early post-operative analgesia is multimodal, and usually utilizes a combination of (Ng & Lee, 2021) 4. Emotional Support on body image and Ostomy. Emotional support. Having a total pelvic exenteration will change your body. It will probably take time for you to adjust to these changes. You may feel frightened, angry, embarrassed, or worried. You may have questions or fears about how this surgery will impact your life and sexuality. These feelings are normal, and most people have them.		

Everybody adjusts in their own way. For some people, it will take a few months to adjust to a changed body image. For other people, it may take longer. As time goes on, you should get stronger and become more confident in caring for your pouch (bag) (Memorial Sloan Kettering Cancer Center, 2025).

References:

Cleveland Clinic. (2018, November 20). '*Life-Altering' Cancer Operation Calls for Multidisciplinary Approach.* https://consultqd.clevelandclinic.org/life-altering-cancer-operation-calls-for-multidisciplinary-approach. https://consultqd.clevelandclinic.org

Ferenschild, F., Vermaas, M., Verhoef, C., Ansink, A. C., Kirkels, W. J., Eggermont, A. M., & de Wilt, J. H. (2009). Total pelvic exenteration for primary and recurrent malignancies. *World journal of surgery*, *33*(7), 1502–1508. https://doi.org/10.1007/s00268-009-0066-7

Grimes, W., Dunton, C. & Stratton M. (2024). *Pelvic exenteration.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK563269/

Memorial Sloan Kettering Cancer Center. (2025). *About your total pelvic exenteration surgery and wet colostomy.* https://www.mskcc.org/cancer-care/patient-education/about-your-total-pelvic-exenteration-surgery-and-wet-colostomy. https://www.mskcc.org

Ng, K & Lee, P. (2021). Pelvic exenteration: Pre-, intra-, and post-operative considerations. Surgical Oncology, Volume 37, 101546, ISSN 0960-7404. https://doi.org/10.1016/j.suronc.2021.101546. (https://www.sciencedirect.com/science/article/pii/S0960740421000359)

Feedback:

	It was hard for me to answer question 1 and why TPE is considered as a curative option and put my answer into two to three sentences answer. I went beyond it but I like how the scenario and questions were phrased. Also, the hints you gave helped me get more specific and right answers.		
8	**Given his symptoms and risk factors, could this be an indication of acute pancreatitis?** Given the symptoms, this could be an indication of acute pancreatitis. The most common causes of acute pancreatitis include gallstones, alcohol use, and hypertriglyceridemia. The patient commonly describes moderate to severe abdominal pain in the epigastrium associated with nausea and anorexia. The abdominal exam typically reveals epigastric tenderness with possible guarding, rigidity, and decreased bowel sounds (Gapp et al., 2025). In the given scenario, patient has persistent vomiting, constipation, severe malnutrition and abdominal pain. The patient received Tylenol for abdominal pain, Miralax and enema for gut motility.] which were non-effective in resolving his symptoms. **What labs and assessments are necessary to confirm that the client has pancreatitis?** According to Basnayake & Ratnam (2015) the diagnosis of acute pancreatitis usually requires a combination of clinical, laboratory and radiological findings. A number of international guidelines have suggested two of the following three features are required for the diagnosis: ● abdominal pain consistent with acute pancreatitis (acute onset of persistent severe epigastric pain often radiating to the back) ● serum lipase activity (or amylase activity) at least three times greater than the upper limit of normal ● characteristic findings of acute pancreatitis on abdominal ultrasound (a CT scan or MRI is considered if the diagnosis is uncertain).	You did a great job answering all parts of the question. Your answers were easy to follow and understand.Thanks for including symptoms of the acute pancreatitis. You did great with the last part of the question with including things that need to be monitor, which is what I was looking for in response to the question. I took 0.5 points for APA formatting. Different sections are italicized and capitalization is missing for Australian Prescriber. Overall, great work!	9.5 / 10

	A number of other pancreatic enzymes and inflammatory biomarkers have been evaluated for their diagnostic value in acute pancreatitis. These include trypsinogens, phospholipase A2, pancreatic elastase, urine trypsinogen activated protein and carboxypeptidase B (Basnayake & Ratnam, 2015). CBC, CMP, Lactate would be ideal to be included. It is also equally important to monitor and frequently re-assess the patient for pain, abdominal tenderness, nausea, vomiting, input and output and hydration status. References: Basnayake, C., & Ratnam, D. (2015). Blood tests for acute pancreatitis. *Australian prescriber*, *38*(4), 128–130. https://doi.org/10.18773/austprescr.2015.043 Gapp, J., Tariq, A. & Chandra, S. (2025). *Acute Pancreatitis.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK482468/ Feedback: This question is easy to understand and clear. I like how it makes me think more of prioritization of care and patient safety. I learned more about acute pancreatitis in children.		
10	1. What is this patient's most likely diagnosis? Please include rationale by using this patient's clinical presentation. 3 points Patient's likely diagnosis is peptic ulcer disease (PUD) due to Helicobacter pylori (H. pylori). The symptoms of peptic ulcer disease are variable and may include abdominal pain, nausea, vomiting, weight loss and bleeding or perforation with complicated disease. The main risk factors for PUD are H. pylori and NSAID use, however not all individuals infected with H. pylori or taking NSAIDs develop PUD. H. pylori cause an inflammatory response with neutrophils, lymphocytes, plasma cells, and macrophages within the mucosal layer and causes epithelial cell degeneration and injury. All patients found to have peptic ulcers should be tested for H. pylori. Of all the noninvasive methods, the urea breath test and stool antigen tests are the	#1 Correct diagnosis of peptic ulcer disease, rationalized by patient's signs and symptoms: 3/3 points #2 Any of the following options to eradicate *H.pylori* w/specific medications: Optimized bismuth quadruple therapy, low-dose rifabutin triple therapy, triple therapy, vonoprazan dual therapy, or vonoprazan triple therapy: 3/3 points	10/ 10

	most feasible and are more accurate than serologic testing (Narayanan, Reddy & Marsicano, 2018). In addition, according to Mayo Clinic (2025) most H. pylori infections don't cause symptoms. When a person gets symptoms, they often come from swelling of the stomach lining or a peptic ulcer. The symptoms can include: an ache or burning pain in the abdomen, stomach pain that may feel worse when the stomach is empty, loss of appetite, frequent burping, bloating and weight loss. In the given scenario, patient presented with upper abdominal pain, nausea, bloating, feeling full after only consuming a small amount of food during meals and a positive urea breath test which is a specific test for H. pylori. **2. Considering the positive urea breath test, what treatment regimen would you expect to be prescribed for this patient? Please include specific medications used in the chosen treatment regimen. (Hint: expected answer is a type of eradication therapy) 3 points** Treatment is usually directed at identifying the factors that lead to PUD. For H. pylori-associated PUD, eradication alone will lead to ulcer healing and prevent further mucosal injury. However, due to rising antibiotic resistance in H. pylori, treatment has become more difficult. First line therapy for H. pylori eradication includes a proton pump inhibitor (PPI), clarithromycin and amoxicillin or metronidazole (for penicillin-allergic patients) for seven to 14 days (Narayanan, Reddy & Marsicano, 2018). When using clarithromycin-based triple therapy, eradication rates can be increased with use of high dose PPI and by extending the duration of treatment from seven to 14 days. For areas with high clarithromycin resistance, bismuth-containing quadruple therapy with a PPI, bismuth, tetracycline and a nitroimidazole (metronidazole or tinidazole) for 14 days or PPI, clarithromycin, amoxicillin, and a nitroimidazole for 14 days is the preferred as first line treatment (Narayanan, Reddy & Marsicano, 2018).	#3 Follow-up after a month, but not more than 2 months; ideally this should be stated in a way that the patient will understand:3/ 3 points References & in-text citations: 1/1 point Thank you for the feedback, the image was intended to illustrate the pathophysiology of this condition, specifically pointing out the causative pathogen which is *H.pylori* and how it disrupts the protective mucosal layer that normally shields the stomach and duodenum from gastric acid and pepsin	

	3. The patient asks when she should schedule a follow-up appointment. What should you tell her? 3 points All patients treated for H. pylori, should be tested to confirm eradication at least four weeks after completing therapy (Narayanan, Reddy & Marsicano, 2018). Follow up appointment should be scheduled in four week's time. References: Mayo Clinic. (2025). *Helicobacter pylori (H. pylori) infection*. https://www.mayoclinic.org/diseases-conditions/h-pylori/symptoms-causes/syc-20356171. https://www.mayoclinic.org. Narayanan, M., Reddy, K. M., & Marsicano, E. (2018). Peptic Ulcer Disease and *Helicobacter pylori*infection. *Missouri medicine*, *115*(3), 219–224. Feedback: Great question and interesting scenario. The image made available, however, was not cited in the question so I wonder what's the relationship of the image to the situation/ question.		
12	**What is Barbies diagnosis and name the planned surgical procedure for this patient?** Barbie's likely diagnosis is colon polyps and the planned surgical procedure would be colonic polypectomy. Colon polyps are protrusions occurring in the colon lumen most commonly sporadic or as part of other syndromes. Polyps are classified as diminutive if 5 mm in diameter or less, small if 6 to 9 mm, or large if they are 1 cm in diameter or more. Polyps can be depressed, flat, sessile or pedunculated. Few polyps arise from submucosa including lipomas, carcinoids or lymphoid aggregates (Meseeha & Attia, 2023).	Great job identifying the diagnosis and naming the correct procedure. You gave a well detailed answer for the bonus question so full points were given. Good work	10/ 10

	Colonic polypectomy is done during colonoscopy for diagnostic and therapeutic purposes using snare polypectomy with electrocautery for pedunculated polyps, or mucosal resection for sessile polyps (Meseeha & Attia, 2023). Polypectomy of colonic polyps has been shown to reduce the risk of colon cancer development and is considered a fundamental skill for all endoscopists who perform colonoscopy. A variety of polypectomy techniques and devices are available, and their use can vary greatly based on local availability and preferences. In general, cold forceps and cold snare have been the polypectomy methods of choice for smaller polyps, and hot snare has been the method of choice for larger polyps. The use of hot forceps has mostly fallen out of favor. Polypectomy for difficult to remove polyps may require the use of special devices and advanced techniques and has continued to evolve (Fyock & Draganov, 2010). **Bonus* what is the significance of early detection of polyps for Barbie?** Screening can often find colorectal cancer early, when it's small, hasn't spread, and might be easier to treat (American Cancer Society, 2025). Given Barbie's family history of colon polyps, early detection can prevent colorectal cancer by finding the polyps early before they turn into cancer. References: American Cancer Society. (2025). *Can colorectal polyps and cancer be found early?*. https://www.cancer.org/cancer/types/colon-rectal-cancer/detection-diagnosis-staging/detection. https://www.cancer.org. Fyock, C. J., & Draganov, P. V. (2010). Colonoscopic polypectomy and associated techniques. *World journal of gastroenterology*, *16*(29), 3630–3637. https://doi.org/10.3748/wjg.v16.i29.3630		

	Meseeha M. & Attia, M. (2023). *Colon polyps.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK430761/ Feedback: Thanks for emphasizing the importance of early detection or early screening most especially to patients who have higher likelihood or predisposition to acquiring cancer due to family history. I like how the question and scenario was direct, short, concise and straightforward.		
14	**1. What do you suspect that Heather is suffering from? (2 pts)** Heather is more likely suffering from small bowel obstruction (SBO). SBO is a common surgical emergency resulting from mechanical or functional disruption of intestinal transit. This condition is most frequently caused by postoperative adhesions, followed by hernias, tumors, or less common conditions like volvulus, gallstone ileus, or endometriosis. SBO presents with hallmark symptoms of abdominal pain, vomiting, distension, and obstipation. The pathophysiology includes bowel distension, impaired venous return, mucosal ischemia, bacterial translocation, and, in severe cases, necrosis, perforation, and peritonitis. Diagnosis involves clinical assessment and imaging, with computed tomography being the gold standard to identify the transition point, ischemia, or perforation. Initial management includes fluid resuscitation, electrolyte correction, and nasogastric decompression, with surgery indicated for strangulation, ischemia, or unresolved obstruction (Schick, Kashyap & Collier, 2025). 2. Beyond the CT scan, what additional assessments might you as the nurse perform to confirm your suspicion? Name 2 assessments and what assessment findings you would expect to find with Heather's diagnosis. (2 pts) **Assessment 1: Abdominal auscultation**	1. Correct. Great description of what a SBO is and it's pathophysiology, though I didn't ask for it, great learning 🙂 (2/2) 2. Auscultation, inspection and palpation are correct! I would say that typically the bowel sounds will be more hypoactive than absent, but they are indeed high-pitched and tinkling in nature. Great description of the differential diagnosis with inspection and palpation, rarely are we so lucky to know exactly what a patient is suffering from, especially with your ED background! (2/2) 3. Really thorough description of the non-surgical management, as well as the insertion of an NG tube. Yes, they are quite difficult to place sometimes! Excellent (3/3) 4. Surgical: You described the need to consult surgery if patient	8 / 10

	Early in the obstruction, bowel sounds may be **hyperactive or high-pitched** as the body attempts to overcome the blockage. However, in more severe cases, bowel sounds may become absent, mainly if strangulation or ischemia is present (Schick, Kashyap & Collier, 2025). **Assessment 2: Abdominal inspection and palpation** If peritonitis or bowel perforation is suspected, the patient may develop signs of peritonitis, such as rigidity, rebound tenderness, and guarding, indicating a surgical emergency. This history and physical exam are critical in establishing the diagnosis, determining whether the obstruction is partial or complete, and guiding further imaging studies and treatment decisions (Schick, Kashyap & Collier, 2025). **Assessment 3: Rectal examination by MD with RN** A rectal examination may be helpful to check for fecal impaction, which could contribute to the obstruction. In some cases, the absence of stool could suggest a more proximal obstruction (Schick, Kashyap & Collier, 2025). **3. What is included in typical treatment of this condition? List general management for non-surgical and surgical options. (6 pts)** Management for SBO according to Vercruysse, Busch & Dimcheff (2021) are the following: **Patient Status- Initial presentation/assessment:** ● CT evidence of SBO ● Benign abdominal exam, passing flatus **Management:** ● IV fluids ● NPO	is worsening, but not what a typical procedure would be. This would typically be a exploratory laparotomy with a lysis of adhesions that are causing the obstruction. It could progress to a open colectomy or resection if there is necrotic bowel found. (⅓).	

	● monitor urine output ● serial abdominal exams ● if patient actively vomiting OR surgical consult team recommendation: placement of nasogastric (NG) tube (18 French or larger to continuous suction **Patient Status- Improvement:** ● Resolution of nausea, vomiting, and abdominal distension ● Passing flatus ● NG suction <300-500 mL/8 hours **Management:** Trial of NGT to dependent drainage ● If NG output continues to improve (and <300-500 mL/8 hours) remove and initiate clear liquid diet ● If NG output remains elevated or increases, continue dependent drainage (or resume suction if recurrent nausea and vomiting). **No Improvement (w/in 24 - 48 hrs):** ● Continued nausea, vomiting, and abdominal distension ● Not passing flatus ● NG suction >300-500 mL/8 hours **Management:** ● Consult surgery (If patient is a surgical candidate) ● Consider additional imaging (discuss with surgery) ● Consider Gastrografin challenge (discuss with surgery) **Worsening:** ● Abdominal pain ● Fever ● Leukocytosis ● AMS **Management:** ● Urgent surgical consultation for consideration of operative management		

Other recommendations:

- Non-operative management of SBO without bowel compromise initially includes IV fluid resuscitation, electrolyte monitoring/supplementation, NPO status, nasogastric decompression, serial abdominal exams, and avoidance/minimal use of opiates
- Assess for clinical improvement frequently during the first 3-5 days of initiating non-operative management, as surgical delays in patients who end up requiring operative intervention may increase morbidity and mortality.
- Consider surgical intervention if concern for bowel compromise develops at any time during the trial of non-operative management.
- Administer Gastrografin challenge in appropriate patients, per protocol and ONLY after evaluation and recommendation by surgery.

References:

Schick M., Kashyap, S. & Collier, S. (2025). S*mall bowel obstruction.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK448079/

Vercruysse, G., Busch, R. & Dimcheff. D. (2021). *Evaluation and management of mechanical small bowel obstruction in adults*. Michigan Medicine University of Michigan. https://www.ncbi.nlm.nih.gov/books/NBK572336/

Feedback:

I took care of a lot of patients who come to ED for SBO. It's interesting to know more about this condition. One of the challenges is placing an NGT and their tolerance to the procedure. Great set of questions!

16	**Which of the following is the most likely causing Mr. Jones' symptoms?** Answer: C) Small bowel perforation **How should the nurse respond to this?** I would acknowledge Mr. Jones fear of needles and distress over the situation. I would tell Mr. Jones that based on the results of the blood work done and other diagnostic adjuncts that he is sick and has serious infection caused by his current condition. I'd also explain that we need to treat the condition quickly with IV fluids, antibiotics, and surgery for it not to escalate and progress into a more life-threatening situation. I will also explain step by step the interventions and plan of care that we are doing in layman's term and understandable to him. I'd further explain to him that Most bowel perforations are treated with surgery to repair the hole. The surgeon will also remove the fluids and waste that has leaked into the abdomen (Canadian Cancer Society, 2022). **"What could have caused this, and how can we make sure it doesn't happen again?" How should the nurse respond, keeping in mind Mr. Jone's PMH/home medications?** I would begin by explaining the pathophysiology of the condition as well as general risk factors and various etiologies. I will the zoom in Mr. Jones past medical history and relate it to his current condition. The cause and etiology, as well as the epidemiology, of small bowel perforations are not well-described. Various causes of perforation have been described, e.g., iatrogenic, traumatic, infectious, malignant, and diverticulum-associated (Onken et al., 2022). Numerous etiologies can lead to ischemia and perforation. In the case of bowel obstruction (small or large), the physical distention of the bowel wall results in decreased perfusion. This ultimately leads to full thickness wall necrosis and subsequent perforation. Bowel obstruction is more common in patients with	<u>Grading Criteria</u> 1.Multiple Choice: 2/2 2.Response to Pt: 4/4 3.Response to Wife: 3/3 4.APA Format: 1/1	10/ 10

	a prior history of surgery (adhesions) but can also result from herniation and strangulation, inflammation, tumors, and foreign bodies (Hafner, Tuma & Hoilat, 2023). Based on Mr. Jones past medical history and current home medications, it is more likely that him having no bowel movements or flatulence for the past 2 days has predisposed him to having the small bowel perforation. His home medication Clozapine has more likely also predisposed him to his problem now. According to the Food and Drug Administration [FDA] (2020), constipation caused by schizophrenia medicine clozapine can lead to serious bowel problems. In order for this not to happen again, you should closely monitor your bowel habits, regular follow up with your primary care physician, early use of stool softeners or laxatives or avoiding food and other intakes that cause constipation. Discussing with your medical provider regarding an alternate medicine for Clozapine would be beneficial too to lower the risks of getting constipation. References: Canadian Cancer Society. (2022). *Bowel perforation.* https://cancer.ca/en/treatments/side-effects/bowel-perforation. https://cancer.ca. U.S. Food & Drug Administration. (2020). *FDA strengthens warning that untreated constipation caused by schizophrenia medicine clozapine (clozaril) can lead to serious bowel problems.* https://www.fda.gov/drugs/drug-safety-and-availability/fda-strengthens-warning-untreated-constipation-caused-schizophrenia-medicine-clozapine-clozaril-can. https://www.fda.gov. Hafner, J., Tuma, F. & Hoilat, G. (2023). *Intestinal perforation.* StatPearls https://www.ncbi.nlm.nih.gov/books/NBK538191/ Onken, F., Senne, M., Königsrainer, A., & Wichmann, D. (2022). Classification und Treatment Algorithm of Small Bowel Perforations Based		

	on a Ten-Year Retrospective Analysis. *Journal of clinical medicine*, *11*(19), 5748. https://doi.org/10.3390/jcm11195748 Feedback:		
18	**1) What complication of cirrhosis is Marco most likely experiencing, and what is the underlying pathophysiology?** Marco's clinical manifestations is indicative of hepatic encephalopathy (HE) which a serious complication of decompensated cirrhosis. Hepatic encephalopathy is characterized by a range of neuropsychiatric abnormalities resulting from the accumulation of neurotoxic substances in the bloodstream of patients with liver dysfunction, and it is a diagnosis of exclusion. This condition ranges from subtle cognitive changes to severe confusion, personality alterations, disorientation, lethargy, and coma. Hepatic encephalopathy is often triggered by infections, electrolyte imbalances, or gastrointestinal bleeding and may occur in acute or chronic liver disease, as well as from congenital or acquired portosystemic shunts. Diagnosis involves clinical evaluation, exclusion of alternative causes, and neuroimaging when necessary. Management focuses on identifying triggers, providing supportive care, and lowering ammonia levels with lactulose, rifaximin, or other therapies (Mandiga, Kommu & Bollu, 2025). **2) Identify one pharmacologic and one non-pharmacologic treatment priority for this condition. Briefly explain the rationale for each.** The management of hepatic encephalopathy generally involves supportive care and ammonia-lowering therapy (Mandiga, Kommu & Bollu, 2025). **Non-pharmacologic Management** Supportive care is a critical component of treatment, which addresses several key aspects, such as maintaining adequate nutrition, preventing	Your answer is thorough and well-supported covering the pathophysiology and multiple treatment angles well. It could have been a bit more patient focused, for example Marco's protein was actually elevated so he should temporarily reduce dietary protein intake, especially in recent high-protein supplementation, which can worsen ammonia buildup. Overall, nice job!	9/ 10

	dehydration and electrolyte imbalances, and ensuring a safe environment to reduce the risk of accidents or falls. Patients with hepatic encephalopathy should not have their protein intake restricted. Instead, they should receive nutritional support with an appropriate energy intake of approximately 35 to 40 kcal/kg/d. This dietary plan should maintain protein intake at around 1.2 to 1.5 gm/kg/d. Supportive care includes ensuring proper hydration and correcting electrolyte imbalances. This involves providing adequate oral fluids and, when necessary, administering intravenous hydration to prevent dehydration. Additionally, any electrolyte abnormalities should be corrected by replenishing essential electrolytes as needed (Mandiga, Kommu & Bollu, 2025). **Pharmacologic Management** Disaccharides, such as lactulose and lactitol, and antibiotics, such as rifaximin, are key components of ammonia-lowering therapy (Mandiga, Kommu & Bollu, 2025). Medications help slow the rate at which the blood absorbs toxins. The doctor may prescribe antibiotics and lactulose (Enulose), a synthetic sugar. These medications can draw ammonia, created by intestinal bacteria from the blood, into the colon. The body will then remove the blood from your colon (Healthline Media, 2025). References: Healthline Media. (2025). *Hepatic encephalopathy.* https://www.healthline.com/health/hepatic-encephalopathy-2#prevention. https://www.healthline.com. Mandiga, P., Kommu, S. & Bollu PC. (2025). *Hepatic encephalopathy*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK430869/ Feedback: I like how the question focused on both pharmacologic and non-pharmacologic management. As I was reading more about this		

	medical condition, I found out that while addressing a patient's agitation, it is crucial to note that sedative medications, such as benzodiazepines, can potentially exacerbate encephalopathy and impede recovery. Therefore, their use should be carefully considered, and, in some instances, temporary restraint may be required until the patient's agitation resolves (Mandiga, Kommu & Bollu, 2025). Great scenario and questions!		
20	**What would you teach your orientee about Sarah's likely diagnosis and the rationale for necessary lab, medication and assessment interventions for Sarah?** I would teach my orientee that Sarah's likely diagnosis is acute liver failure, most likely due to acetaminophen (Tylenol) overdose or Drug-Induced Liver Injury. I would further include this in my teaching that according to LiverTox (2016), acetaminophen is a widely used nonprescription analgesic and antipyretic medication for mild-to-moderate pain and fever. Harmless at low doses, acetaminophen has direct hepatotoxic potential when taken as an overdose and can cause acute liver injury and death from acute liver failure. Even in therapeutic doses, acetaminophen can cause transient serum aminotransferase elevations. Management, history and physical assessments according to Agrawal, Murray & Khazaeni (2025) are as follows: Most patients with acetaminophen toxicity are initially asymptomatic or present with mild, nonspecific symptoms. Obtaining a detailed history, including accurate timing, formulation, dosage, and any co-ingestants, is essential for proper diagnosis. The clinical course of acetaminophen toxicity consists of 4 stages. **Stage I** ● First 30 minutes to 24 hours ● Possibly asymptomatic	For full credit, answer should include diagnosis of **acute/fulminant liver failure (1 pts)**;interventions, including **necessary labs (liver enzymes, ammonia, coags) (2 pts)**, medications to consider **(acetylcysteine) (2 pts)**, assessments (bleeding, LOC (2 pts) Liver functions that place Sarah at the highest risk at this point are **clotting factors and hepatic encephalopathy (2 pts)**. Correct APA citation (1 pt). I appreciate the work you did by writing all of the stages of acetaminophen toxicity, however by the point that her LOC is impaired and she has an apparent bleed, she has progressed to liver failure and I was looking for interventions directly related to liver failure. You did a very thorough job on this question. Above and beyond what I was looking for in what I hoped would be a "softball question". Thank you!	10/ 10

	● May experience nausea, vomiting, diaphoresis, pallor, lethargy, and malaise ● Laboratory values are generally normal, but aminotransferase levels may increase within 8 to 12 hours ● Central nervous system depression and elevated anion gap metabolic acidosis are possible with a >30 g ingestion **Stage II** ● 24 to 72 hours ● Laboratory results reveal hepatotoxicity and nephrotoxicity ● Clinically, the patient appears improved, but laboratory values worsen ● Right upper quadrant pain and hepatomegaly ● Evidence of abnormal prothrombin time (PT) and total bilirubin, along with oliguria and renal function abnormalities ● Case reports indicate acute pancreatitis **Stage III** ● 72 to 96 hours ● Aminotransferase levels peak, with values exceeding 10,000 IU/L ● More pronounced symptoms, including jaundice, confusion, hyperammonemia, abnormal aminotransferases, and bleeding diathesis, along with recurrence of symptoms from stage 1 ● Acute renal failure in 50% of patients with frank liver failure and 10% to 25% of patients with significant liver damage ● Indirect hyperbilirubinemia ● Prolonged PT		

	● Hypoglycemia ● Lactic acidosis ● The most common stage for death to occur due to multisystem organ failure **Stage IV** ● If the patient survives stage 3 ● Recovery phase ● Typically begins by day 4 and completes by day 7 ● Symptoms and laboratory values may require several weeks to normalize ● Histopathologic changes in the liver become evident The diagnosis of acetaminophen toxicity begins with obtaining a serum acetaminophen level, regardless of symptoms. If the timing of ingestion is unclear, an acetaminophen level should be obtained at the time of presentation and again 4 hours after the first dose. Additional recommended investigations include: ● Serum aminotransferase levels ● PT and international normalized ratio (INR) ● Electrolytes ● Blood urea nitrogen and creatinine ● Serum total bilirubin concentration ● Amylase ● Urinalysis ● Human chorionic gonadotropin in women of childbearing age		

	● Arterial or venous blood gas and serum lactate in critically ill patients or those with altered mental status ● Screening of blood and urine for other ingested drugs ● Electrocardiogram in patients with an intentional overdose ● Salicylate level ● Computed tomography scan of the head in the presence of altered mental status The treatment of acetaminophen poisoning is dependent on the timing of drug ingestion. If the patient presents within 1 hour of ingestion, gastrointestinal decontamination should be attempted with activated charcoal (AC). Some studies suggest using activated charcoal if the patient presents within 4 hours of ingestion, as it has been shown to decrease acetaminophen absorption, reduce the need for *N*-acetylcysteine, and lower the risk of liver injury when administered within 4 hours of ingestion. Use beyond 1 hour is most effective with large ingestions or with ingestion of an extended-release form or any medication that can delay gastric emptying. Contraindications to activated charcoal include gastrointestinal obstruction and an unprotected airway. Orogastric lavage or whole bowel irrigation is not recommended (Agrawal, Murray & Khazaeni, 2025). Closely monitor for worsening mental status or alteration in the level of consciousness, bleeding or bruising, vital signs and perfusion as well as intake and output most especially urine output. **What primary functions of the liver will cause the most immediate risk to Sarah?** The primary liver functions that will cause the most immediate risk includes its clotting factor synthesis which can potentially lead to active bleeding, glucose metabolism which can potentially lead to hypoglycemia and detoxification which can potentially lead to cerebral edema and encephalopathy.		

	References: Agrawal, S., Murray, B. & Khazaeni B. (2025) *Acetaminophen toxicity.* StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK441917/ LiverTox. (2016). *Acetaminophen.* Clinical and research information on drug-induced liver injury. https://www.ncbi.nlm.nih.gov/books/NBK548162/ Feedback: We receive cases of drug ingestions in the ED. It's great to learn more about acute liver failure due to acetaminophen (Tylenol) overdose. The scenario is great. It included a lot of information in my answers since the condition and management was broad and expansive.		