N321 Care Plan #1

Lakeview College of Nursing

Whisper Brown

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Demographics (3 points)

Date of Admission 9/21/23	**Client Initials** C.B.	**Age** 82 y/o	**Gender** Female
Race/Ethnicity White	**Occupation** Homemaker	**Marital Status** Widowed	**Allergies** Ciprofloxacin Hcl, Depakote (valproic acid), Dilantin (phenytoin), Dilaudid (Hydromorphone), Morphine, Sulfa antibotics, Tetanus immune globin, Tentanus toxids, Aspirin
Code Status Full Code	**Height** 165.1 cm	**Weight** 76.1 kg	

Medical History (5 Points)

Past Medical History: Anemia, Bipolar 1 disorder (HCC), Constipation, Dysphagia, Hypercholesteremia, Hypertension, Hypothyroid, Insomnia, MDD (Major depressive disorder), Osteoporosis, Paranoid schizophrenia (HCC), Restless leg, Stroke (HCC) (9/12/2014), Unspecified convulsions (HCC), and Viral hepatitis C

Past Surgical History: Gastric bypass and Upper gastrointestinal endoscopy (N/A, 9/13/22)

Family History: Not on file/patient couldn't answer

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

Patient denies any tobacco, alcohol, or drug use

Assistive Devices: Client states that "wheelchair used at home." Patient had dentures.

Living Situation: Nursing home (Arcadia Care)

Education Level: College, client states they “did not receive an associate degree”

Admission Assessment

Chief Complaint (2 points): Abdominal pain (4 days prior to ER admission) accompanied by coffee ground emesis and generalized weakness/malaise, abdominal pain/vomiting

History of Present Illness – OLD CARTS (10 points): Patient is an 82 year old female that arrived to the emergency room at OSF by ambulance on 9/21/23 due to vomiting and abdominal pain. Patient states “stomach didn’t feel good on 9/21/23.” Patient states that “symptoms have lasted from 9/17/23 until current admission.” Symptoms described by patient were “aching pain in the stomach and vomiting.” Patient’s aggravating factors were “sitting up in bed.” Patient states “there are no relieving factors to the pain.” As of 9/26/23, the patient was not on any medication for the current illness.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Small bowel obstruction

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points):

Due to mechanical obstruction of the digestive tract, small intestinal obstruction is a common surgical emergency. The most common cause is intra-abdominal adhesions, even though it can be brought on by other pathologic conditions (Schick, Kashyap, Meseeha, 2022). Proximal bowel distention and distal bowel decompression are caused by intestinal twisting. Peristalsis may initially increase, resulting in frequent bowel motions. The proximal bowel distention may cause vomiting. The twisted intestine will initially stop the passage of venous blood, which will cause edema and inflammation in the intestine wall. The third fluid spacing also happens rather frequently. Bacterial translocation and ischemia are risks associated with the thicker and irritated gut wall. Peritonitis and bacteremia can result from bacterial translocation, with Escherichia coli being the most prevalent culprit. The arterial flow will be interrupted as the colon continues to twist, which will cause intestinal ischemia and, if left untreated, perforation, peritonitis, and death (Schick, Kashyap, Meseeha, 2022).

The patient may have a past medical history of hernias, inflammatory bowel illness, cancer, or previous abdominal surgery. Abdominal pain, distention, nausea, and vomiting are the most typical presentations. The nature of the stomach pain may be either progressive or sporadic. Constipation, obstipation, with or without flatus, and even loose stools, may be related to it (Schick, Kashyap, Meseeha, 2022).

All ages of people are susceptible to small bowel blockage. Hyponatremia, hypokalemia, leukocytosis, metabolic alkalosis, and increased serum lactate are among the laboratory results that support the diagnosis of intestinal blockage. Important factors to consider are the patient's vital signs and overall look since symptoms like fever, tachycardia, relative hypotension, dry mucous membranes, and obtundation can indicate an oncoming circulatory shock in the context

of total strangulation and an impending intestinal perforation. There are numerous typical causes and risk factors, such as: adhesions, hernias, inflammatory disease, and malignant tumors. Adhesions are scar tissue bands that may develop following pelvic or abdominal surgery. The most common cause of small bowel blockage in the US is prior abdominal surgery. A hernia is an area of the abdominal wall that is weaker may allow portions of the intestine to pass through. In the area where the bowel pokes through the abdominal wall, this causes a bulge where it may become obstructed if it is stuck or severely compressed. In the US, hernias are the second most typical cause of small intestinal blockage. Parts of the small intestine can be harmed by inflammatory bowel diseases such diverticulitis or Crohn's disease. Strictures in the intestine or aberrant tunnel-like holes (fistulas) are examples of complications. A small portion of all small bowel blockages are caused by cancer. The tumor typically travels to the small intestines from the colon, female reproductive organs, breasts, lungs, or skin instead of starting in the small intestine (Cleveland Clinic, 2019).

A small bowel obstruction can be diagnosed using a variety of tests, including an abdominal X-ray that can detect obstructions in the small and large intestines and an abdominal CT scan that enables your doctor to determine if the obstruction is complete or partial. The patient received radiological imaging when receiving the CT Abdomen pelvis w/ Contrast. The finding indicated a small bowel obstruction in the rectum and sigmoid colon. The other test that were done were a chest single view portable to determine the reason for the patient’s shortness of breath and hyponatremia, a chest single view that was done to identify more about the patient’s bowel obstruction, a small bowel follow through to get more information about the bowel obstruction, a abdomen KUB flat plate to look more into the bowel obstruction, a CT liver

biopsy to determine any metastatic liver disease, and an abdomen 2 views (supine w/ decubitus or erect views) to get more information about the bowel obstruction.

Treatment and management of a small bowel obstruction is crucial. Most patients with intestinal blockage require immediate hospital care. In most cases, complete blockages call for emergency surgery. Treatments for partial bowel blockages may be necessary to stabilize your condition before nonsurgical options like bowel rest are used. The severity of the obstruction must be considered. Some treatments for bowel obstruction are IV fluids, nasogastric tubes, medications, bowel rest, and surgery. IV fluids may be needed to treat dehydration. To remove fluids and air that have backed up due to the obstruction, a nasogastric tube may be required. A long, thin tube called a nasogastric tube enters via the nose and descends into the stomach or intestines. Anti-emetics, which stop nausea and vomiting, as well as painkillers, can help the patient stay more comfortable. To give the intestine time to remove the obstruction or shrink to its usual size, the patient might need to forgo eating or drinking. Alternatively, the patient might only be permitted to sip on a particular beverage that contains the nutrients. If the intestine is totally clogged, surgery will probably be required. The medical professional may remove tumors or adhesions that are obstructing the flow of blood. Rarely, they might need to remove affected tissue sections. Occasionally, the medical professional can insert a stent (a mesh tube) to maintain the intestine's opening and remove the obstruction without further surgery. Alternatively, the patient might require a stent as a stopgap measure until they are in good enough health to have surgery to remove the obstruction (Cleveland Clinic, 2019).

Pathophysiology References (2) (APA):

Cleveland Clinic. (2019, March 20). *What is a Bowel Obstruction?*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/bowel-obstruction

Schnick, M. A., Kashyap, S., & Meseeha, M. (2023, April 10). *Small Bowel Obstruction.* National Library of Medicine; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK448079/

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.80-5.30 10(6)/mcL	4.74 10(6)/mcL	4.26 10(6)/mcL	N/A
Hgb	12.0-15.8 g/dL	12.4 g/dL	10.7 g/dL	"Drugs that may cause decreased levels of Hgb include antibiotics, antineoplastic drugs, aspirin, indomethacin, and rifampin" (Pagana, Pagana, & Pagana, 2023). Low Hgb count could be indictive by the patient being on Acetylsalicylic acid (Aspirin PO).
Hct	36.0-47.0%	40.1%	36.0%	N/A
Platelets	140-440 10(3)/mcL	643 10(3)/mcL	385 10(3)/mcl	Elevated platelet counts are indicative of "cancer" (Pagana, Pagana, & Pagana, 2023). The elevated platelet count in the patient could be indicative of a metastatic liver.
WBC	4.00/12.00 10(3)/mcL	10.50 10(3)/mcL	16.60 10(3)/mcL	Elevated WBC count is indicative of "physical active and stress" (Pagana, Pagana, & Pagana, 2023). The elevated WBC count in the patient could be indictive of the patient's stress level based on the type of stress reliever medication the patient

				is on such as Alprazolam (Xanax).
Neutrophils	47.0-73.0%	82.5%	85.7%	Elevated neutrophil count is indicative of inflammation related to a bowel obstruction (Pagana, Pagana, & Pagana, 2023).
Lymphocytes	18.0-42.0%	10.5%	8.7%	Decreased lymphocytes are indicative of inflammation related to a bowel obstruction (Pagana, Pagana, & Pagana, 2023).
Monocytes	4.0-12.0%	6.3%	4.3%	N/A
Eosinophils	0.0-5.0%	0.4%	1.0%	N/A
Bands		N/A	N/A	N/A

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136-145 mmol/L	133 mmol/L	130 mmol/L	Decreased Serum Sodium levels is indicative of diarrhea/vomiting (Pagana, Pagana, & Pagana, 2023).
K+	3.5-5.1 mmol/L	4.3 mmol/L	4.9 mmol/L	N/A
Cl-	98-107 mmol/L	100 mmol/L	104 mmol/L	N/A
CO2	22-30 mmol/L	24 mmol/L	22 mmol/L	N/A
Glucose	70-99 mg/dL	123 mg/dL	90 mg/dL	Elevated glucose levels are indictive of "many forms of stress" (Pagana, Pagana, & Pagana, 2023). The elevated glucose level in the patient could be indicative of the stress the patient is experiencing.
BUN	10-20 mg/dL	31 mg/dL	21 mg/dL	Elevated BUN levels are indicative of "GI bleeding" (Pagana, Pagana, & Pagana, 2023). The elevated BUN level in the patient could be indicative of any GI bleeding caused by the small bowel obstruction.
Creatinine	0.60-1.00 mg/dL	0.66 mg/dL	0.51 mg/dL	Decreased levels of creatinine are indictive of "debilitation" (Pagana, Pagana, & Pagana, 2023). The decreased creatinine levels in the

				patient could be indicative of the patient decreased motility.
Albumin	3.5-5.0 g/dL	3.6 g/dL	2.8 g/dL	Decreased levels of albumin are indicative of inflammation in the liver (Pagana, Pagana, & Pagana, 2023).
Calcium	8.7-10.5 mg/dL	9.3 mg/dL	8.4 mg/dL	Decreased levels of Calcium are indicative of a bowel obstruction (Pagana, Pagana, & Pagana, 2023).
Mag	1.6-2.6 mg/dL	2.6 mg/dL	N/A	N/A
Phosphate	34-104 mg/dL	N/A	N/A	N/A
Bilirubin	0.2-1.2 mg/dL	0.3 mg/dL	0.3 mg/dL	N/A
Alk Phos	40-150 U/L	170 U/L	129 U/L	Elevated Alk Phos levels are indicative of "poor liver function" (Pagana, Pagana, & Pagana, 2023). The levels could be elevated in the patient due to the metastasized liver.
AST	5-34 U/L	17 U/L	11 U/L	N/A
ALT	0-55 U/L	8 U/L	10 U/L	N/A
Amylase	60-120 U/L	N/A	N/A	N/A
Lipase	8-78 U/L	<4.0 U/L	N/A	Decreased levels of lipase are indicative of "permanent damage to the liver" (Pagana, Pagana, & Pagana, 2023). The levels could be decreased due to cystic fibrosis.
Lactic Acid	0.7-2.0 mmol/L	1.0 mmol/L	N/A	N/A

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	0.8-1.1	N/A	N/A	N/A

PT	10.1-13.1 seconds	N/A	N/A	N/A
PTT	25-36 seconds	N/A	N/A	N/A
D-Dimer	>250 mg/L FEU	N/A	N/A	N/A
BNP	0-622 ng/mL	N/A	N/A	N/A
HDL	>60 mg/dL	N/A	N/A	N/A
LDL	<130 mg/dL	N/A	N/A	N/A
Cholesterol	<200 mg/dL	N/A	N/A	N/A
Triglycerides	40-180 mmol/L	N/A	N/A	N/A
Hgb A1c	<7 mg/dL	N/A	N/A	N/A
TSH	0.5-5.0 mIU/mL	N/A	N/A	N/A

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Clear	Cloudy/Yellow	N/A	Cloudy urine is indicative of dehydration or UTI (Pagana, Pagana, & Pagana, 2023).
pH	5.0-9.0	5.5	N/A	N/A
Specific Gravity	1.003-1.030	>1.030	N/A	Elevated levels of specific gravity can be indicative of "dehydration" (Pagana, Pagana, & Pagana, 2023).
Glucose	Negative	Negative	N/A	N/A
Protein	Negative	Trace	N/A	Elevated levels of protein in the urine can be indicative of dehydration (Pagana, Pagana, & Pagana, 2023).
Ketones	Negative	1+	N/A	Elevated levels of Ketones in the urine can be indicative of infection (Pagana, Pagana, & Pagana, 2023).
WBC	Negative	6-10	N/A	Elevated levels of WBC are

				indicative of infection (Pagana, Pagana, & Pagana, 2023).
RBC	Negative	Negative	N/A	N/A
Leukoesterase	Negative	N/A	N/A	N/A

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Explanation of Findings**
Urine Culture	No growth	Mixed w/ e. coli	N/A	Growth is indicative of UTI (Pagana, Pagana, & Pagana, 2023).
Blood Culture	No growth	N/A	N/A	N/A
Sputum Culture	No growth	N/A	N/A	N/A
Stool Culture	No growth	Positive	N/A	Growth is indicative of bacteria, parasites, blood, or other abnormal organisms that are found. This may cause infection (Pagana, Pagana, & Pagana, 2023).

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2023). *Mosby's Diagnostic and Laboratory Test Reference*. Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- CT ABDOMEN PELVIS W/ CONTRAST (9/21/23)
- XR CHEST SINGLE VIEW PORTABLE (9/21/23)
- XR CHEST SINGLE VIEW (9/21/23)
- XR SMALL BOWEL FOLLOW THROUGH (9/22/23)

- XR ABDOMEN KUB FLAT PLATE (9/23/23)
- CT LIVER BIOPSY (9/24/23) (ACTIVE)
- XR ABDOMEN 2 VIEWS (SUPINE W/ DECUBITUS OR ERECT VIEWS) (9/25/23)

Diagnostic Test Correlation (5 points): With stomach pain, the patient entered the emergency room. To identify the source of the patient's abdominal pain, a CT abdomen pelvis with contrast was required.

There are findings of enhancing hypodense lesions on right/ left lob of liver (indicative of metastatic disease) (the largest is in the right lob measures 3.5cm x 2.5cm), cysts in both kidneys (the largest cyst in the right kidney measures 3.4cm x 1.8cm) (the largest cyst in the left kidney measures 3.7cm x 2.2cm), severely diluted loops of the small bowel with air-fluid levels (indicative of small bowel obstruction, probably at distal ileum), no free air noted, suspicious osteolysis at the level of L3-L4 and L-5 (may be elevated by MRI, metastasis is not ruled out), fecal impairment in the rectum and sigmoid colon, and stercoral colitis. The largest lesion is in the right lobe (3.5cm x 2.5cm).

Reason for findings: The finding of hypodense lesions in the right and left lobes indicate metastatic disease. This can occur when cancer cells invade the body's bloodstream or lymphatic system after separating from the primary tumor (Cleveland Clinic, 2021). The cysts in both kidneys indicate disorders that may impede kidney function. However, simple kidney cysts are a form of kidney cyst that occur more frequently. Simple kidney cysts are rarely problematic and are not malignant (Cleveland Clinic, 2021). Severely diluted loops of the small bowel indicate a small intestinal obstruction or ileus (Cleveland Clinic, 2020). When there is a clinical finding of bowel obstruction, such as a closed-loop obstruction, strangling, or ischemic small bowel, the

gasless abdomen suggests a longer-lasting obstruction. Suspicious osteolysis at the level of L3-34 and L5 is indicative of metastasis. Fecal impairment of the rectum and sigmoid colon if indicative of a bowel obstruction. Stercoral colitis is indicative of a protracted case of constipation causing feces to stagnate. This causes the colon's volume to expand, to become impaction-prone, and eventually to deform. Fecaloma is a kind of hardened fecal debris that settles in specific intestinal regions.

The patient arrived in the Emergency room with abdominal pain. The XR chest single view portable was required due to the patient having shortness of breath and hyponatremia.

There are findings of no acute cardiopulmonary abnormality (no change since 3/13/23).

Reason for findings: These finds are indicative of no abnormality since 3/13/23.

The patient arrived in the Emergency room with abdominal pain. The XR chest single view was required due to the patient having intestinal obstruction.

Since earlier that day (9/21/23), an NG tube was placed with the tip in the region of the gastric fundus.

Reason for findings: These findings show that there was NG tube placed in the gastric fundus. These are usually placed for the decompression of the stomach in the setting of intestinal obstruction or ileus but can also be used to administer nutrition or medication to patients who are unable to tolerate oral intake.

The patient arrived in the Emergency room with abdominal pain. The XR small bowel follow through was required due to the patient having a small bowel obstruction.

There are findings of severely diluted loops of the small bowel. The contrast is still in the bowel (9-hour delay) (KUB was suggested, small bowel obstruction was not ruled out) (24-hour delay).

Reason for findings: The findings of the severely diluted loops in the small bowel are indicative of a small bowel obstruction and a requirement for a KUB.

The patient arrived in the Emergency room with abdominal pain. The XR abdomen KUB flat plate was required due to the patient having a small bowel obstruction.

There are findings of bowel gas pattern being constant with partial small bowel obstruction. The degree of small bowel dilatation has shown moderate decrease since 9/22/23.

Reason for findings: The reason for the findings the bowel gas pattern that is constant with a partial small bowel obstruction is indicative of fecal impairment.

The patient arrived in the Emergency room with abdominal pain. The CT liver biopsy was required due to the patient indicating metastatic liver disease.

There are no findings for this diagnostic test due to the diagnostic test still being active.

Reason for findings: N/A

The patient arrived in the Emergency room with abdominal pain. The XR abdomen 2 views (supine w/ decubitus or erect views) were required due to the patient having a bowel obstruction.

There are findings of diluted loops of the small bowel, noted with air-fluid levels seen in the decubitus abdomen (indicative of partial bowel obstruction). There was no definite free air noted in the decubitus abdomen. Contrast noted in the descending colon and transverse colon.

Reason for findings: The findings of diluted loops of the small bowel are indicative of fecal impairment in the small bowel. The air-fluid levels seen in the decubitus abdomen are also indicative of a partial bowel obstruction. The absence of air in the decubitus abdomen happens when there is little gas seen on abdominal radiography, it is referred to as a gasless abdomen. When the patient's medical history is known, the precise cause is frequently discernible. Typical

causes include high blockage: congenital atresia, occlusion of the gastric outlet. blockage of the small bowel.

Diagnostic Test Reference (1) (APA):

Cleveland Clinic. (2020, December 21). *What is a bowel obstruction?*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/bowel-obstruction

Cleveland Clinic. (2021, January 4). *Kidney cysts: Causes, symptoms, treatment & prevention*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/14884-kidney-cysts

Cleveland Clinic. (2021, December 20). *Metastasis (metastatic cancer): Definition, Biology & Types*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/22213-metastasis-metastatic-cancer

Current Medications (10 points, 1 point per completed med)

10 different medications must be completed
Home Medications (5 required)

Brand/Generic	Hydrocodone-acetaminophen (Norco)	Acetylsalicylic acid (Aspirin PO)	Lactobacillus (Acidophilus PO)	Buspirone Hcl (Buspar)	Fluphenazine (Prolixin)
Dose	5-325 mg Tablet	81 mg	1 Capsule	7.5 mg Tablet	2.5 mg Tablet
Frequency	Every 4 hours PRN	Daily	Daily	2 times a day	Daily
Route	Oral	Oral	Oral	Oral	Oral
Classification	"Pharmacologic: Schedule II controlled substance Therapeutic: Narcotic	"Pharmacologic: Nonnarcotic, analgesic, salicylate; antipyretic; antiplatelet	"Pharmacologic: Probiotic Therapeutic: Antidiarrheals" (Jones & Bartlett, 2023)	"Pharmacologic: Azapirone Therapeutic: Anxiolytic" (Jones & Bartlett, 2023)	"Pharmacologic: Phenothiazine Therapeutic: Antipsychotic" (Jones & Bartlett, 2023)

	analgesic; antitussive" (Jones & Bartlett, 2023)	Therapeutic: analgesic; antipyretic; antiplatelet" (Jones & Bartlett, 2023)			
Mechanism of Action	"CNS depressant with moderate to severe relief of pain. Suppresses cough reflex by direct action on cough center in medulla" (Jones & Bartlett, 2023)	"Major action is primarily due to inhibiting the formation of prostaglandins involved in the production of inflammatory, pain, and fever" (Jones & Bartlett, 2023)	"The regulation of host immune response" (Jones & Bartlett, 2023)	"May act as a partial agonist at serotonin 5-hydroxytryptamine receptors in the brain, producing anti-anxiety effects" (Jones & Bartlett, 2023)	"May block postsynaptic dopamine receptor sites in the CNS. This action may depress areas of the brain that control activity and aggression, including the cerebral cortex, hypothalamus, and the limbic system" (Jones & Bartlett, 2023)
Reason Client Taking	"To reduce pain" (Jones & Bartlett, 2023)	"To reduce pain" (Jones & Bartlett, 2023)	"To increase the health microbes in the intestine" (Jones & Bartlett, 2023)	"To resolve patient's anxiety" (Jones & Bartlett, 2023)	"To control psychotic disorders" (Jones & Bartlett, 2023)
Contraindications (2)	"Medication can cause worsening bowel obstruction" (Jones & Bartlett, 2023). "Don't take if patient has trouble breathing" (Jones & Bartlett, 2023).	"Don't take aspirin if allergic" (Jones & Bartlett, 2023). "If patient has history of GI ulceration" (Jones & Bartlett, 2023).	"If the patient has a weakened immune system" (Jones & Bartlett, 2023). "Do not take if constipated" (Jones & Bartlett, 2023).	"If the patient has severe hepatic or renal impairment" (Jones & Bartlett, 2023). "If patient has worsening anxiety" (Jones & Bartlett, 2023).	"If the patient had hepatic dysfunction" (Jones & Bartlett, 2023). "If patient has a history of convulsions" (Jones & Bartlett, 2023).
Side Effects/Adverse Reactions (2)	"Dysphoria" (Jones & Bartlett, 2023). "Urticaria" (Jones &	"Tinnitus" (Jones & Bartlett, 2023). "Occult bleeding"	"Difficulty of swallowing" (Jones & Bartlett, 2023). "Fast heartbeat"	"Urine retention" (Jones & Bartlett, 2023). "Diaphoresis" (Jones & Bartlett,	"Insomnia" (Jones & Bartlett, 2023). "Slurred speech" (Jones

	Bartlett, 2023).	(Jones & Bartlett, 2023).	(Jones & Bartlett, 2023).	2023).	& Bartlett, 2023).
Nursing Considerations (2)	"Monitor for nausea and vomiting, especially in ambulatory patients" (Jones & Bartlett, 2023). "Monitor respiratory status and bowel elimination" (Jones & Bartlett, 2023).	"Monitor for salicylate toxicity. In adults, a sensation of fullness in the ears, tinnitus, and decreased of muffled hearing are the most frequent symptoms" (Jones & Bartlett, 2023). "Monitor for loss of tolerance to aspirin. Symptoms usually occur 15 minutes to3 hours after ingestion: Profuse rhinorrhea, intestinal cramps, diarrhea" (Jones & Bartlett, 2023).	"Monitor for allergic reaction to lactobacillus" (Jones & Bartlett, 2023). "Monitor for excess decrease in GI function" (Jones & Bartlett, 2023).	"Use cautiously in patients with hepatic or renal impairment" (Jones & Bartlett, 2023). "Institute safety precautions because of possible adverse CNS reactions" (Jones & Bartlett, 2023).	"Use cautiously in patients with a history of glaucoma or renal impairment" (Jones & Bartlett, 2023). "Watch for signs of hepatic failure, such as jaundice" (Jones & Bartlett, 2023).

Hospital Medications (5 required)

Brand/Generic	Alprazolam (Xanax)	Pantoprazole (Protonix)	Acetaminophen (Tylenol)	Ketorolac (Toradol)	Ondansetron (Zofran)
Dose	0.5 mg	40 mg	650 mg	15 mg	4 mg
Frequency	Once	2 times daily	Every 4 hours PRN	Every 6 hours PRN	Every 6 hours PRN
Route	Oral	Intravenous injection	Oral	Intravenous injection	Intravenous injection

Classification	"Pharmacologic: benzodiazepine Therapeutic: Anxiolytic, antipanic" (Jones & Bartlett, 2023).	"Pharmacologic: Proton pump inhibitor Therapeutic: Antiulcer" (Jones & Bartlett, 2023).	"Pharmacologic: Nonsalicylate, para-aminophenol derivate Therapeutic: Antipyretic, nonopioid analgesic" (Jones & Bartlett, 2023).	"Pharmacologic: NSAID Therapeutic: Analgesic" (Jones & Bartlett, 2023).	"Pharmacologic: Selective serotonin (5-HT3) receptor antagonist Therapeutic: Antiemetic" (Jones & Bartlett, 2023).
Mechanism of Action	"May increase effects of gamma-aminobutyric acid (GABA) and other inhibitory neurotransmitters by binding to specific benzodiazepine receptors in cortical and limbic areas of the CNS. GABA inhibits excitatory stimulation, which helps control emotional behavior. The limbic system contains many benzodiazepine receptors, which may help explain drugs anti-anxiety effects" (Jones & Bartlett, 2023).	"Interferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphosphatase enzyme system, or protein pump, in gastric parietal cells. Normally, the protein pump uses energy from hydrolysis of ATPase to drive H+ and chloride out of parietal cells and into stomach lumen in exchange for potassium, which leaves the stomach lumen and enters parietal cells. After this exchange, H+ and Cl-combine in the stomach to form hydrochloric	"Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system. Acetaminophen also acts directly on temperature-regulating center in the hypothalamus by inhibiting synapsis of prostaglandin" (Jones & Bartlett, 2023).	"Blocks cyclooxygenase. An enzyme needed to synthesize prostaglandins period prostaglandins mediate inflammatory response and cause local vasodilation, pain, and swelling. They also promote pain transmission from periphery to spinal cord. By blocking cyclooxygenase and inhibiting prostaglandins, this NSAID reduces inflammation and relieves pain" (Jones & Bartlett, 2023).	"Block serotonin receptors sensually in the chemoreceptor trigger zone and peripherally at vagal nerve terminals in the intestine. This action reduces nausea and vomiting by preventing serotonin release in the small intestine (probable cause of chemotherapy and radiation-induced nausea and vomiting) and my blocking signals to the CNS. Ondansetron may also bind to other serotonin receptors and to mu-opioid receptors period" (Jones

		acid. Pantoprazole Irreversibly inhibits the final step in gastric acid production by blocking the exchange of intracellular H+ and extracellular K+, thus preventing H+ from entering the stomach in additional HCl from forming" (Jones & Bartlett, 2023).			& Bartlett, 2023).
Reason Client Taking	"To treat generalized anxiety disorder" (Jones & Bartlett, 2023)	"To treat erosive esophagitis associated with gastroesophageal reflux disease (GERD) short-term" (Jones & Bartlett, 2023)	"To relieve mild to moderate pain; to relieve fever" (Jones & Bartlett, 2023)	"To provide short-term management of moderate to severe acute pain that requires analgesia at the opioid level, usually in a postoperative setting" (Jones & Bartlett, 2023).	"To prevent nausea and vomiting associated with highly emetogenic cancer chemotherapy" (Jones & Bartlett, 2023).
Contraindications (2)	"If the patient has a history of convulsions" (Jones & Bartlett, 2023). "If the patient has acute angle-closure glaucoma" (Jones & Bartlett, 2023).	"If patient has breathing problems" (Jones & Bartlett, 2023). "If the patient has increased anxiety" (Jones & Bartlett, 2023).	"If the patient has severe hepatic impairment" (Jones & Bartlett, 2023). "If the patient is allergic to acetaminophen" (Jones & Bartlett, 2023).	"If the patient has recent GI bleeding" (Jones & Bartlett, 2023). "If the patient is high risk for bleeding" (Jones & Bartlett, 2023).	"If patient has stomach or intestinal problems" (Jones & Bartlett, 2023). "If patient has had abdominal surgery" (Jones & Bartlett, 2023).
Side Effects/Adverse	"Abnormal involuntary	"Insomnia" (Jones &	"Hypotension" (Jones &	"Hypertension" (Jones &	"Hypotension" (Jones &

Reactions (2)	movements" (Jones & Bartlett, 2023). "Depersonalization" (Jones & Bartlett, 2023).	Bartlett, 2023). "Hallucinations" (Jones & Bartlett, 2023)	Bartlett, 2023). "Insomnia" (Jones & Bartlett, 2023).	Bartlett, 2023). "Hyperglycemia" (Jones & Bartlett, 2023).	Bartlett, 2023). "Myocardial ischemia" (Jones & Bartlett, 2023).
Nursing Considerations (2)	"Monitor patient closely if depression occurs because of the potential for episodes of hypomania, mania." "Suicidal ideation and instruct patient never to increase prescribed dose because of risk of dependence." (Jones & Bartlett, 2023)	"Expect to monitor PT or INR during therapy if patient takes an oral anticoagulant" (Jones & Bartlett, 2023). "Ensure the continuity of gastric acid suppression during transition from oral to I.V. pantoprazole (or vice versa) because even a brief interruption of effective suppression can lead to serious complications" (Jones & Bartlett, 2023).	"Use acetaminophen cautiously in patients with hepatic impairment or active hepatic disease, alcoholism, chronic malnutrition, severe hypovolemia, or severe renal impairment" (Jones & Bartlett, 2023). "Calculate total daily intake of acetaminophen including other products that may contain acetaminophen so maximum daily dosage is not exceeded" (Jones & Bartlett, 2023).	"Know that the risk of heart failure increases with ketorolac use because drug is a NSAID. This class of drugs should not be used in patients with severe heart failure but, if unavoidable, monitor patient for worsening of heart failure" (Jones & Bartlett, 2023). "Monitor patient with history of inflammatory bowel disease, such as Crohn's disease or ulcerative colitis, because ketorolac may worsen these conditions" (Jones & Bartlett, 2023).	"Be aware that oral disintegrating tablets may contain aspartame, which is metabolized to phenylalanine and must be avoided in patients with phenylketonuria" (Jones & Bartlett, 2023). "Be aware that ondansetron may mask symptoms of adynamic progressive ileus or gastric distention after abdominal surgery. Monitor patient for decreased bowel activity, especially if patient has risk factors for gastrointestinal obstruction" (Jones & Bartlett, 2023).

Medications Reference (1) (APA):

Jones &. Bartlett Learning, & Learning, J. B. (2022). *2023 Nurse's Drug Handbook*. Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Alertness: Patient is alert and responsive, responds to verbal stimuli, and responds to painful stimuli. Orientation: Patient is oriented to person, place, time, and situation A&O x4 Distress: Patient states "they are in no distress other than some pain in the stomach." Overall Appearance: Overall appearance of the patient was appropriate for age and well groomed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Skin Color: Usual for ethnicity (white). Character: Dry upon palpation. Temperature: Warm upon palpation. Turgor: Slow to return Bruises/wounds/rashes: Present bruises on arms and hands but no wounds or rashes. Braden Score:19 Drains present: No drains present.

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head: Symmetry present in skull and face Neck: Supple with good structure and movement. Trachea is symmetrical upon palpation. Thyroid is nonpalpable. Lymph nodes are not swollen. Ears: Hearing is decreased. The external ear and ear canal are clear of debruise and the tympanic membrane is grey and pearly. Eyes: Vision is cloudy, and eyes are symmetrical on the face. PERRLA is fast to respond with no debruise on the internal or external parts of the eyes. Nose: Nose is symmetrical while moist internally. No drainage, edema, or abrasions. Mouth: Mouth is pink and symmetrical on both sides. Poor dentition. Uvula raises and falls when patient says “ahhh.” Mucous Membranes: Membranes are pink and moist with no cracks.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	Heart Rhythm: Normal. No gallops, murmurs, or rubs heard upon auscultation. Peripheral pulses 2+ bilaterally. PMI palpable at the 5th intercostal space at MCL Heart Sounds: Normal (S1 and S2 sounds present) Pulses: 3+ (Normal) Cap Refill Time: Slower than 3 seconds Neck Vein Distention: No signs of neck vein distention Edema: None
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Accessory Muscle Use: Patient was not using any accessory muscle use. Respirations: Patient's respirations were normal. Respiration Pattern: Respirations were normal.

	Breath Sounds: Clear through all locations. Breath sounds are clear bilaterally. No wheezes, crackles or rhonchi noted. Lung Aeration: Equal
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	Diet at Home: Normal Current Diet: Low fiber Height: 165.1 cm Weight: 76.1 kg Auscultation Bowel Sounds: Hyperactive Last BM: 9/25/23 Palpation: Pain upon palpation, no masses present. Abdomen is soft, tender in the lower left and right quadrant. Inspection: Distention: None Incisions: None Scars: None Drains: None Wounds: None Ostomy: None Nasogastric: None Feeding tubes/PEG Tube: None
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒**	No dysuria, no urgency, no frequency, no hematuria. Color: Yellow Character: Cloudy

Inspection of genitals: **Catheter: Y ☐ N ☒** **Type:** **Size:**	Quantity of Urine: 325 mL Pain with Urination: None Dialysis: None Inspection of Genitals: Normal Catheter: None
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	No arthralgia Neurovascular Status: Nail beds were normal and intact, extremities were normal with no edema, rashes, or lesions, skin was warm upon palpation. ROM: Decreased range of motion, patient couldn't get out of bed Supportive devices: Wheelchair at home Strength: Weak. ADL Assistance: Assistance needed for everyday tasks Fall Risk: 90 Activity/Mobility Status: Not Assessed Independent: No, needs assistance Needs Assistance with Equipment: Not Assessed Needs Support to Stand and Walk: Not Assessed
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	MAEW: No, has trouble moving legs PERRLA: Normal Strength Equal: Yes Orientation: Person is alert and orientated x4 (person, place, time, and situation). Mental Status: Normal for age

	Speech: Normal Sensory: Normal LOC: Alert
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Coping Methods: Reading Developmental level: Patient could read/write and can form a full structured sentence. Religion and What it Means to Patient: patient stated that "they are Christian." Personal/Family Data: Patient states that their "daughter and sister are the support system"

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	67 bpm	120/59 mmHg	16 rpm	98.3 °F	100%
1140	72 bpm	102/81 mmHg	17 rpm	98.1 °F	100%

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0730	0-10 scale	Abdomen	5/10	Aching	None
1140	0-10 scale	Abdomen	4/10	Aching	None

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	Saline Lock Size of IV: 22 gauge Location of IV: Left forearm Date of IV: 9/22/23

	Patency of IV: Patent Signs or erythema, drainage, etc.: None IV dressing assessment: Clean, dry, and intact

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
240 mL	Client states “I’m dry”

Nursing Care

Summary of Care (2 points)

Overview of care: I went and introduced myself to the patient at 0730. The patient had just woken up and was watching television. I proceeded to take the patient’s vital signs at 0730. The patient was instant on getting breakfast, so I proceeded to order the patient some breakfast. I provided the patient with a new blanket after ordering the patient’s breakfast. I assisted my preceptor in administering medications to my patient. I then assisted my preceptor in other duties such as collecting supplies and assisting in giving medications to other patients. I took a second set of vital signs on my patient at 1140. I saw my patient before the end of my shift to ensure there was nothing I could do for the patient at this time. The patient declined any assistance at this time. I then reported back to my preceptor before leaving the unit.

Procedures/testing done: 2 view x-ray of abdomen

Complaints/Issues: Patient complains of “aching pain in the stomach”

Vital signs (stable/unstable): Stable

Tolerating diet, activity, etc.: Tolerated low fiber diet, bowel movement 9/24/23

Physician notifications: No needs

Future plans for client: Complete medications as directed when patient gets home, continue low-fiber diet.

Discharge Planning (2 points)

Discharge location: Nursing home (Arcadia Care)

Home health needs (if applicable): None due to living in a nursing home

Equipment needs (if applicable): Wheelchair

Follow up plan: Follow up with PCP as needed/ordered

Education needs: Try to eat more frequently and in smaller portions. For instance, eat five or six modest meals throughout the day rather than two or three large ones.

Give food a thorough chew. To make it liquid, try to chew each bite 20 times or so.

Avoid raw produce with skins, husks, strings, or seeds, as well as high-fiber foods. If a portion of the bowel is scarred or restricted, these can form a ball of undigested material that can result in a blockage.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk of bleeding	Risk for the rupturing of	**1.** Keep an eye out for	**1.** "Patient experiences no	The patient was very receptive

related to small bowel obstruction as evidenced by positive stool culture	the intestine	physiologic responses (vital signs, oxygen saturation, and LOC [behavior]) that continue to fall within predicted or typical ranges; Early compensatory mechanisms for bleeding change blood pressure, pulse, and breathing, and a skilled doctor can spot these modest changes. **2.** Assess wounds, bandages, and eliminated bodily fluids using eye inspection or simple chemical testing (guaiac hemoccult) to check for open bleeding and occult bleeding in urine and feces.	incidence of active bleeding" (Phelps, 2022).	and responded well to understanding the signs and symptoms of bleeding and understood the outcome was to not have any bleeding.
2. Risk for hypovolemia related to small bowel obstruction as evidenced	Current nausea and vomiting	**1.** As directed, administer electrolyte treatment. **2.** Assess for	**1.** "Patient's intake will equal or exceed output" (Phelps, 2022).	The patient was very receptive and responded well to understanding the reason for the

by severe nausea and vomiting.		additional dehydration while keeping an eye on the patient's I/O.		electrolyte treatment. Patient responded well.
3. Risk for pain related to inflammation of the intestine as evidenced by air-fluid levels seen in the decubitus abdomen	The patient is experiencing lower abdominal pain that is both intense and painful. The patient is displaying pain and discomfort in a nonverbal manner.	**1.** Examine the patient's pain sensations and behavioral clues, then deliver the necessary painkillers. **2.** Assist the patient in finding a comfortable position and, as necessary, splint or support sore regions using pillows.	**1.** "Patient identifies most effective pain relief measures" (Phelps, 2022).	The patient was very receptive and responded well to the pain management.

Other References (APA):

Phelps, L.L. (2022). *Nursing Diagnosis Reference Manual* (12th ed.) Lippincott Williams & Wilkins.

Concept Map (20 Points):

Subjective Data

Patient reports to the Emergency Department on 9/21/23 with abdominal pain, vomiting, and nausea beginning on 9/17/23.

Nursing Diagnosis/Outcomes

1. Risk for bleeding related to small bowel obstruction as evidenced by positive stool culture
2. Risk for hypovolemia related to acute pancreatitis as evidence by severe nausea and vomiting
3. Risk for pain related to inflammation of the intestine as evidenced by air-fluid levels seen in the decubitus abdomen

Outcomes:
1. “Patient experiences no incidence of active bleeding” (Phelps, 2022).
2. “Patient’s intake will equal or exceed output” (Phelps, 2022).
3. “Patient identifies most effective pain relief measures” (Phelps, 2022).

Objective Data

BP: 120/59
Pulse: 67
Resp. Rate: 16
Temperature: 98.3F
O2: 100%

CT abdomen pelvic w/ contrast finding of lesions on right and left lobes of liver.

Chest single view portable findings of no acute cardiopulmonary abnormality.

Chest single view shows that NG tube has been placed with the tip in the region of gastric fundus

Small bowel follow through findings of severely diluted loops of the small bowel

Abdomen KUB flat plate findings of bowel gas pattern constant with partial small bowel obstruction

CT liver biopsy no findings due to the order being active

Abdomen 2 views (supine w/ decubitus or erect views) findings of diluted loops of the small bowel, noted air-fluid levels seen in the decubitus abdomen

Client Information

82 year-old Female
Height: 165.1 cm
Weight: 76.1 kg
Full code

Nursing Interventions

1. Keep an eye out for physiologic responses (vital signs, oxygen saturation, and LOC [behavior]) that continue to fall within predicted or typical ranges; Early compensatory mechanisms for bleeding change blood pressure, pulse, and breathing, and a skilled doctor can spot these modest changes.
-Assess wounds, bandages, and eliminated bodily fluids using eye inspection or simple chemical testing (guaiac hemoccult) to check for open bleeding and occult bleeding in urine and feces.
2. As directed, administer electrolyte treatment.
- Assess for additional dehydration while keeping an eye on the patient's I/O.
3. Examine the patient's pain sensations and behavioral clues, then deliver the necessary painkillers.
- Assist the patient in finding a comfortable position and, as necessary, splint or support sore regions using pillows.

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Cleveland Clinic Staff. (2021, December 20). *Metastasis (metastatic cancer): Definition, biology & types*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/22213-metastasis-metastatic-cancer

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