

N321 Care Plan #3

Lakeview College of Nursing

Cidney Hinchman

**Demographics (3 points)**

<b>Date of Admission</b> 10/29/2020	<b>Patient Initials</b> C.L.S.	<b>Age</b> 63	<b>Gender</b> Female
<b>Race/Ethnicity</b> Caucasian	<b>Occupation</b> Retired	<b>Marital Status</b> Single	<b>Allergies</b> Aspirin, penicillin's, pineapple
<b>Code Status</b> Full code	<b>Height</b> 5'6"	<b>Weight</b> 183 lb.	

**Medical History (5 Points)**

**Past Medical History:** The client has a past medical history of fecal impaction, colitis, irritable bowel syndrome, peptic ulcers, constipation, chronic depression, asthma, GERD, seasonal allergic rhinitis, vertigo, gastritis, essential hypertension, thoracic back pain, low back pain, and shoulder pain.

**Past Surgical History:** The client has previously had a breast biopsy showing she was benign. The client also previously had a cesarean section, a tonsillectomy, a colonoscopy on 11/12/2019, and an EGD on 11/12/2019.

**Family History:** The client reported no past family history.

**Social History (tobacco/alcohol/drugs):** The client reported no history of tobacco, alcohol, or illicit drug use.

**Assistive Devices:** The client reports no use of assistive devices in the hospital or at home.

**Living Situation:** The client lives in a single-story home by herself.

**Education Level:** The client has her GED.

**Admission Assessment**

**Chief Complaint (2 points):** The client called 9-1-1 with a complaint of abdominal and back pain.

**History of present Illness (10 points): Onset:** On October 29, a 63-year-old white, single, female, called 9-1-1 with a chief complain of abdominal and back pain. The client was brought into the emergency department at Iroquois Memorial Hospital by ambulance and was later admitted that night for a fecal impaction and cholecystitis. **Location:** The client is experiencing pain in her abdomen near her umbilical and in her lower back region. **Duration:** The client stated, “I started having pain the night before I called 9-1-1 for help and it has been constant since then.” **Characteristics:** The client stated, “the pain feels sort of achy and sharp”.

**Associated Manifestations:** The client stated. “moving around and deep breathing made the pain worse.” **Relieving factors:** The client took acetaminophen to help relieve the pain. The client also tried to limit her mobility. **Treatment:** The client has not reported any previous treatments for her fecal impaction or cholecystitis.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points):** Fecal impaction

**Secondary Diagnosis (if applicable):** Cholecystitis

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

This client was primarily diagnosed with fecal impaction. Fecal impaction occurs when waste becomes stuck inside of your colon (Kahn, 2019). When your colon becomes impacted, your feces becomes dry and stuck causing you to be unable to excrete the waste from your body (Kahn, 2019). Symptoms of fecal impaction are serious and require medical attention (Kahn, 2019). Some signs of fecal impaction include leakage of liquid stool, abdominal discomfort, abdominal bloating, abdominal pain, nausea, vomiting, unexplained weight loss, feeling the need to push, not wanting to eat, and dehydration (Kahn, 2019). Constipation is the primary cause of fecal impaction (Kahn, 2019). Constipation can occur from side effects of certain medications, insufficient nutrient intake, dehydration, lack of fiber, an illness, frequent bouts of diarrhea,

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mental stress, obstruction of the intestinal tract, continuous vomiting, and certain diseases (Kahn, 2019). Fecal impaction can be diagnosed by your primary care provider through several different examinations such as a physical exam, a digital rectal exam, x-ray of the abdomen, and an abdominal ultrasound (Kahn, 2019). There are multiple treatment options for fecal impaction such as a laxative, manual removal, an enema, and water irrigation (Kahn, 2019). This client had a CT of her abdomen and pelvis with and without contrast that showed prominent gaseous distention of the colon. This client also had an abdominal obstructive series examination that showed gaseous distention of her bowel loops. This client was given 200mg of Colace twice a day to help soften her stools and prevent further constipation. Therefore, the client later became unimpacted, but after the client was unimpacted she developed abdominal pain in her right upper quadrant with worsening distention.

Upon further examination, the client was diagnosed with cholecystitis and had a laparoscopic cholecystectomy. Cholecystitis occurs when your gallbladder becomes inflamed (Mayo Clinic, 2020). The gallbladder can become inflamed from gallstones, a tumor, a bile duct blockage, blood vessel problems, or an infection (Mayo Clinic, 2020). In my client's case she appeared to have gallstones (Mayo Clinic, 2020). The client had an intraoperative cholangiogram that showed no evidence of residual gallstones, but the doctor assumed that the client had previously passed the gallstones before the examination.

Some signs and symptoms of cholecystitis includes severe pain in your upper right or center abdomen, pain that spreads to your right shoulder or back, tenderness over your abdomen when it is being touched, nausea, vomiting, and a fever. This client presented to the emergency department with abdominal pain and back pain. This client had also previously been nauseous and vomiting prior to coming to the emergency department.

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The client may receive several tests and procedures to be diagnosed with cholecystitis (Mayo Clinic, 2020). These tests and procedures could include a blood test, imaging tests that show the gallbladder, or by a scan that shows the movement of bile through the body (Mayo Clinic, 2020). The client received many of these tests and procedures such as a blood and urine culture, an intraoperative cholangiogram, a CT of the abdomen and pelvis with and without contrast, a nuclear medicine hepatobiliary scan/HIDA scan, a chest portable, and an abdomen obstructive series. The doctor was able to fully diagnose the client with cholecystitis after the CT of the abdomen and pelvis with and without contrast showed that the gallbladder was distended and inflamed.

Finally, the doctor was able to come up with a treatment plan to help relieve the client of her symptoms and pain that she had been experiencing. When it comes to cholecystitis there are multiple treatment options depending on the severity of your cholecystitis. Some treatment options include fasting, fluids through a vein in your arm, antibiotics to fight infection, pain medications, gallstone removal, or gallbladder removal (Mayo Clinic, 2020). In this client's case she had her gallbladder. The client also received sodium chloride 0.9% with potassium chloride 40 mEq/L continuously to help maintain an adequate fluid intake and increase her electrolyte levels. Lastly, the client received vancomycin as her antibiotic to help prevent an infection from occurring after surgery. The client handled the surgery well on 11/05/2020 and planned to be discharged on 11/06/2020 if everything went as planned.

### **Pathophysiology References (2) (APA):**

Kahn, A. (2019, March 8). *Impacted Bowel*. Healthline. [https://www.healthline.com/health/fecal-impaction#\\_noHeaderPrefixedContent](https://www.healthline.com/health/fecal-impaction#_noHeaderPrefixedContent)

Mayo Clinic. (2020, August 28). *Cholecystitis - Symptoms and causes*.

[https://www.mayoclinic.org/diseases-conditions/cholecystitis/symptoms-causes/syc-20364867#:~:text=Cholecystitis%20\(ko%2Dlth%2Dis,your%20small%20intestine%20\(bile\).](https://www.mayoclinic.org/diseases-conditions/cholecystitis/symptoms-causes/syc-20364867#:~:text=Cholecystitis%20(ko%2Dlth%2Dis,your%20small%20intestine%20(bile).)

**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	4-5.5 million cells	4.16 million cells	N/A	
Hgb	12-15 g/dL	12.8 g/dL	N/A	
Hct	42% to 52%	39.5%	N/A	Hematocrit is slightly decreased due to trauma (Capriotti & Frizzell, 2016).
Platelets	150,000 – 400,000 cells/mm <sup>3</sup>	228,000 cells/mm <sup>3</sup>	N/A	
WBC	4,500 – 11,000 cells/mm <sup>3</sup>	5,000 cells/mm <sup>3</sup>	N/A	
Neutrophils	45% to 75%	53%	N/A	
Lymphocytes	20% to 40%	32.9%	N/A	
Monocytes	4% to 6%	8.7%	N/A	Monocytes are slight elevated due to possibly having to fight off an infection within the body (Capriotti & Frizzell, 2016).
Eosinophils	Less than 7%	4.2%	N/A	
Bands	0.0% - 1.0%	0.03%	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
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<b>Na-</b>	135 – 145 mEq/L	140 mEq/L	N/A	
<b>K+</b>	3.5 – 5.0 mEq/L	3.2 mEq/L	N/A	Potassium being slight decreased is likely caused from the client's diuretic medication (Capriotti & Frizzell, 2016).
<b>Cl-</b>	98 – 108 mEq/L	105 mEq/L	N/A	
<b>CO2</b>	22 -29 mEq/L	28 mEq/L	N/A	
<b>Glucose</b>	70-100 mg/dL	100 mg/dL	N/A	
<b>BUN</b>	8 – 25 mg/dL	6 mg/dL	N/A	Bun is slightly decreased due to malnutrition (Capriotti & Frizzell, 2016).
<b>Creatinine</b>	0.6 – 1.3 mg/dL	0.78 mg/dL	N/A	
<b>Albumin</b>	3.5 – 5.2 gm/dL	3.2 gm/dL	N/A	Albumin levels slightly decreased due to inflammatory disease and malnutrition (Capriotti & Frizzell, 2016).
<b>Calcium</b>	8.6 – 10 mg/dL	8.6 mg/dL	N/A	
<b>Mag</b>	1.6 – 2.6 mg/dL	N/A	N/A	
<b>Phosphate</b>	2.5 – 4.5 mg/dL	N/A	N/A	
<b>Bilirubin</b>	Less than 1.5 mg/dL	N/A	N/A	
<b>Alk Phos</b>	20 – 140 U/L	228 U/L	N/A	These values indicate that the client's liver is not working properly (Capriotti & Frizzell, 2016).
<b>AST</b>	10 – 30 units/L	176 units/L	N/A	Elevated AST levels can indicate that the client has liver damage or another organ that makes it, like the heart or kidneys (Capriotti & Frizzell, 2016).
<b>ALT</b>	10 – 40 units/L	401 units/L	N/A	Elevated AST levels are consistent with the client's liver not working properly (Capriotti & Frizzell, 2016).
<b>Amylase</b>	-	N/A	N/A	

<b>Lipase</b>	-	N/A	N/A	
<b>Lactic Acid</b>	-	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
<b>INR</b>	1 second	1.02 seconds	N/A	These values could indicate that the client's blood clots more slowly than desired (Capriotti & Frizzell, 2016).
<b>PT</b>	9.5 – 11.3 seconds	13.8 seconds	N/A	These values could indicate that the client's blood clots more slowly than desired (Capriotti & Frizzell, 2016).
<b>PTT</b>	30 – 40 seconds	25 seconds	N/A	These values indicate that the client lacks or has a low level of one of the factors that clots the blood (Capriotti & Frizzell, 2016).
<b>D-Dimer</b>	Less than or equal to 250 ng/mL	N/A	N/A	
<b>BNP</b>	15.00 – 99.90 pg/mL	12.60 pg/mL	N/A	Decreased BNP levels can indicate heart failure (Capriotti & Frizzell, 2016). Low levels of BNP may also be caused by obesity and pulmonary edema (Capriotti & Frizzell, 2016).
<b>HDL</b>	More than 60 mg/dL	N/A	N/A	
<b>LDL</b>	Less than 130 mg/dL	N/A	N/A	
<b>Cholesterol</b>	Less than 200 mg/dL	N/A	N/A	
<b>Triglycerides</b>	Less than 150 mg/dL	N/A	N/A	
<b>Hgb A1c</b>	Less than 7%	N/A	N/A	
<b>TSH</b>	0.4 – 4.0 mU/L	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
<b>Color &amp; Clarity</b>	Colorless, yellow, clear	Colorless, yellow, clear, no odor present	N/A	
<b>pH</b>	4.5 - 8	5.50	N/A	
<b>Specific Gravity</b>	1.005 – 1.035	1.030	N/A	
<b>Glucose</b>	Negative	Negative	N/A	
<b>Protein</b>	Negative	Trace	N/A	These values can indicate that the client's kidneys are not working as well as they should be (Capriotti & Frizzell, 2016).
<b>Ketones</b>	Negative	Negative	N/A	
<b>WBC</b>	Negative	N/A	N/A	
<b>RBC</b>	Negative	N/A	N/A	
<b>Leukoesterase</b>	Negative	Negative	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
<b>Urine Culture</b>	Clean catch, no growth	No growth	N/A	
<b>Blood Culture</b>	No growth after 3 days	No growth after 3 days	N/A	
<b>Sputum Culture</b>	N/A	N/A	N/A	
<b>Stool Culture</b>	N/A	N/A	N/A	

**Lab Correlations Reference (APA):**

Capriotti, T., & Frizzell, J. P. (2016). *Human Pathophysiology*. F.A. Davis Company.

Crnp, H. B. M. R., Palm, M. L., & Md, L. B. S. (2016). *Bates' Nursing Guide to Physical Examination and History Taking* (2nd ed.). LWW.

Kee, J.L.F. (2017). *Pearson handbook of laboratory & diagnostic tests with nursing implications*. Pearson.

### **Diagnostic Imaging**

#### **All Other Diagnostic Tests (5 points):**

- Coronavirus Imh, Sars-cov2, RNA (Covid-19)
  - The client's results were negative.
- Intraoperative Cholangiogram
  - The exam was performed in the surgery room for the indication of cholelithiasis. During this procedure, there were three intraoperative sequences of images during the injection of contrast. The first injection sequence showed contrast leaking into the duodenum which indicates an unobstructed appearance of the common bile duct. Although there was an indication of a filling defect in the common bile duct it ended up being normal. The second sequence showed that the disc material flushed into the duodenum indicating a successful passage of the material. Lastly, the third sequence showed evidence of an additional nonopaque material within the common bile duct which appeared to move around freely within the common bile duct. This could indicate gallbladder sludge or unspacified bowel or air bubbles. Overall normal spilling of contract into the duodenum was showed and

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no evidence for residual gallstones were noted. The doctor assumes that the client previously had gallstones, but they had passed before the examination.

- Nuclear Medicine Hepatobiliary Scan/HIDA Scan
  - This scan was done because of the indication of acute cholecystitis and rising of the client's bilirubin levels. The activity of the client's common bile duct and duodenum was identified during the scan. Findings were normal and the common bile duct was noted as patent at that time.
- CT Abdomen and Pelvis with and without Contrast
  - This was performed for the indication of the client's acute onset of her upper right quadrant abdominal pain. The client was suspected to have had an obstruction or perforation of the abdomen. Prominent gaseous distention of the colon was noted. The cecum was located and noted as being distended. The gallbladder was distended, and inflammation was consistent with the diagnosis of cholecystitis. The client was also noted to have mild ascites. No abnormalities were noted within the client's urinary bladder or uterus.
- Chest, portable
  - This was performed for the indication of sepsis due to the client's abdominal pain in her upper right quadrant along with her cholecystitis. The client's heart size and mediastinal structures were noted to be within normal range. The client's lungs and surrounding areas of the lung seem to show prominence of the interstitial and vascular markings indicating mild congestion. Although the client's lung field is limited due to a suboptimal inspiratory effect. The client's shoulder joints are seen to have mildly chronic degenerative changes bilaterally. It was also noted that the

client's right lung base showed small subpulmonic pleural effusion. Overall, the findings indicated mild chronic congestion that had worsened since the last examination on 12/06/2016.

- Abdomen, obstructive series
  - This examination was done because of the indication of the client's abdomen being distended. This client was diagnosed with fecal impaction and was unimpacted before the examination, but since the client became unimpacted she developed abdominal pain in the upper right quadrant with worsening distention. It was noted that gaseous distension of the bowel loops was seen. A cecal bascule, or obstruction of the cecum was suggested due to the falling of the mobile cecum. Aside from the colonic distention there was no significant small bowel distention seen on the images taken. Multiple pelvic calcifications consistent with phleboliths was also noted. Overall, the findings were persistent with the gaseous distention of the colon and the air-fluid levels in the severity of distention appeared to have improved since the last examination on 10/30/2020/

**Diagnostic Test Correlation (5 points):**

The client was brought into the emergency department at Iroquois Memorial Hospital with a chief complaint of abdominal pain and back pain. During assessment, the client was found to have a fecal impaction. The doctor ordered some tests such as an intraoperative cholangiogram, a CT of the abdomen and pelvis with and without contrast, a HIDA scan, a chest portable, and an obstructive series of the abdomen. Upon further examination the client was also found to have an inflamed gallbladder known as cholecystitis. It was also noted that the client's colon had prominent gaseous distention, the right lung base showed small subpulmonic pleural effusion,

and her mild chronic congestion had worsened. Lastly, the client had seemed to have acute hydrops cholecystitis indicating the client had passed gallstones prior to her examination of the common bile duct.

**Diagnostic Test Reference (APA):**

Cnrm, R. P. J. H. L., & PhD Rn, K. C. H. (2017). *Brunner & Suddarth’s Textbook of Medical-Surgical Nursing (Brunner and Suddarth’s Textbook of Medical-Surgical)* (14th ed.). LWW.

Kee, J.L.F. (2017). *Pearson handbook of laboratory & diagnostic tests with nursing implications*. Pearson.

**Current Medications (10 points, 1 point per completed med)  
\*10 different medications must be completed\***

**Home Medications (5 required)**

<b>Brand/Generic</b>	Acetaminophen (Tylenol)	Ondansetron hydrochloride (Zofran)	Pantoprazole sodium (Pantoloc (CAN))	Spirolactone (Aldactone)	Cetirizine hydrochloride (Zyrtec)
<b>Dose</b>	650mg	4mg	40mg	25mg	10mg
<b>Frequency</b>	q.8.h. PRN	q.6.h. PRN	q.d.	q.d. for 90 days	q.d.
<b>Route</b>	Oral	Oral	Oral	Oral	Oral
<b>Classification</b>	Nonsalicylate, para-aminophenol derivative, antipyretic, nonopioid analgesic	Selective serotonin receptor antagonist, Antiemetic	Proton pump inhibitor, antiulcer	Potassium-sparing diuretic, diuretic	Antihistamine

<p><b>Mechanism of Action</b></p>	<p>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 synthesis of prostaglandin E2.</p>	<p>Blocks serotonin receptors centrally 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 and by blocking signals to the CNS. Ondansetron may also bind to other serotonin receptors and to mu-opioid receptors.</p>	<p>Interferes with gastric acid secretions by inhibiting the hydrogen-potassium-adenosine triphosphatase enzyme system, or proton pump, in gastric parietal cells.</p>	<p>Normally, aldosterone attaches to receptors on the walls of distal convoluted tubule cells, causing sodium and water reabsorption in the blood. Spironolactone competes with aldosterone for these receptors, thereby preventing sodium and water reabsorption and causing their excretion through the distal convoluted tubules. Increased urinary excretion of sodium and water reduces blood volume and blood pressure.</p>	<p>Cetirizine works in the body by blocking the action of histamine, a substance in the body that causes allergic symptoms.</p>
<p><b>Reason Client Taking</b></p>	<p>This medication is being taken for pain and fever.</p>	<p>This medication is being taken for nausea and vomiting.</p>	<p>This medication is being taken to treat GERD.</p>	<p>This medication is being taken to treat hypertension.</p>	<p>This medication is being taken for seasonal allergic rhinitis.</p>
<p><b>Contraindications (2)</b></p>	<p>Severe hepatic impairment, severe active liver disease</p>	<p>Concomitant use of apomorphine, hypersensitivity to ondansetron</p>	<p>Concurrent therapy with rilpivirine containing</p>	<p>Acute renal insufficiency, hyperkalemia</p>	<p>Hypersensitivity to cetirizine and its components,</p>

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		or its components	products, hypersensitivity to pantoprazole		hypersensitivity to hydroxyzine
<b>Side Effects/Adverse Reactions (2)</b>	Agitation, fatigue	Hypotension, serotonin syndrome	Hepatic failure, pancreatitis	Gastric bleeding, hypotension	Headaches, dry mouth
<b>Nursing Considerations (2)</b>	1. Use acetaminophen cautiously in clients with hepatic impairment or active hepatic disease, alcoholism, chronic malnutrition, severe hypovolemia, or severe renal impairment 2. Acetaminophen can cause hepatotoxicity, so liver function tests need to be ordered and monitored	1. Monitor client closely for serotonin syndrome 2. Monitor client closely for hypersensitivity to ondansetron because hypersensitivity reactions, including anaphylaxis and bronchospasms may occur.	1. Monitor the client's output because it may cause acute interstitial nephritis. 2. Monitor client for bone fracture, especially in client's receiving multiple daily doses for more than a year because it can increase the risk of developing osteoporosis-related fractures of the hip, spine, or wrist.	1. Evaluate the effectiveness of the drug by assessing blood presence and presence degree of edema if necessary. 2. Instruct the client to take this medication with meals or milk.	1. Assess respiratory status often 2. If allergy testing is planned, medication should be stopped 48 hours prior to the test.

**Hospital Medications (5 required)**

<b>Brand/Generic</b>	Vancomycin hydrochloride (Firvanq)	Ketorolac tromethamine (Sprix)	Sucralfate (Carafate)	Docusate sodium (Colace)	Sodium chloride 0.9% with KCl
<b>Dose</b>	2mg in 500ml 0.95 sodium chloride	30mg	1g	200mg	40 mEq/L
<b>Frequency</b>	One time use	q.6.h. for 48	Before meals	b.i.d.	125mL/hr

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	post-op at 250mL/hr	hours	and at bedtime		continuously
<b>Route</b>	Intravenously	Intravenous push	Oral	Oral	Intravenously
<b>Classification</b>	Glycopeptide, antibiotic	NSAID, analgesic	GI protectant, antiulcer	Surfactant, laxative, stool softener	Electrolyte replacement
<b>Mechanism of Action</b>	Inhibits bacterial RNA and cell wall synthesis; alters permeability of bacterial membranes, causing cell wall lysis and cell death	Blocks cyclooxygenase, an enzyme needed to synthesize prostaglandins. 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.	May react with hydrochloric acid in the stomach to form a complex that buffers acid. The complex adheres electrostatically to proteins on the ulcer's surface and creates a protective barrier at the ulcer site. Sucralfate also inhibits back-diffusion of hydrogen ions and adsorbs bile acids and pepsin, actions that promote healing of an existing duodenal ulcer and prevent reoccurring ulcer formation.	Acts as a surfactant that softens stools by decreasing surface tension between oil and water in feces. This action lets more fluid penetrate stool, forming a softer fecal mass.	Acts as the major cation in intracellular fluid, activating many enzymatic reactions essential for physiological processes, including nerve impulse transmission and cardiac and skeletal muscle contraction. Potassium also helps maintain electroneutrality in cells by controlling exchange of intracellular and extracellular ions. It also helps maintain normal renal function and acid-base balance.
<b>Reason Client Taking</b>	This medication was given post-op to help prevent any infections from occurring.	This medication is being taken post-op to help relieve pain.	This medication is being taken to treat peptic ulcers.	This medication is being taken to help soften stools and treat	This medication is being taken to keep the client hydrated and give the client

				constipation.	a good source of electrolytes.
<b>Contraindications (2)</b>	Hypersensitivity to corn or corn products when given with dextrose solutions, hypersensitivity to vancomycin or its components.	GI perforation, or peptic ulcer disease	End-stage renal disease, uncontrolled diabetes mellitus with hyperglycemia	Fecal impaction; hypersensitivity to docusate salts or their components	Acute dehydration, UTI (potassium citrate)
<b>Side Effects/Adverse Reactions (2)</b>	Hypotension, nephrotoxicity	GI bleeding, perforation	Bronchospasm, angioedema	Dizziness, palpitations	GI bleeding, bloody stools
<b>Nursing Considerations (2)</b>	<p>1. Infuse over at least 1 hr/g of vancomycin. Rapid delivery may cause hypotension or transient “red man syndrome,” characterized by chills; fainting; fever; flushing of face, neck, torso, and upper arms; hypotension; nausea; tachycardia; and vomiting.</p> <p>2. Observe I.V. infusion site for evidence of extravasation, including necrosis, pain, tenderness, and thrombophlebitis.</p>	<p>1. Monitor the client for adequate fluid balance because this drug can promote fluid retention and worsen the client’s condition.</p> <p>2. Monitor CBC for decreased hemoglobin and hematocrit because drug may worsen anemia.</p>	<p>1. Administer drug to the client on an empty stomach.</p> <p>2. Advise client to not take antacids within 30 minutes of taking sucralfate.</p>	<p>1. expect excessive or long-term use of docusate to cause dependence on laxatives for bowel movements, electrolyte imbalances, osteomalacia, steatorrhea, and vitamin and mineral deficiencies.</p> <p>2. assess for laxative abuse syndrome, especially in women with anorexia nervosa, depression, or personality disorders.</p>	<p>1. Review client’s medical history before administering potassium chloride, because there are many conditions that may predispose client to develop hyperkalemia and increased sensitivity to potassium.</p> <p>2. Monitor serum creatinine level and urine output during administration, because adequate renal function is needed for potassium supplementation.</p>

**Medications Reference (APA):**

Jones & Bartlett Learning. (2019). *2019 Nurse's drug handbook*. Burlington, MA.

**Assessment**

**Physical Exam (18 points)**

<p><b>GENERAL (1 point):</b>  <b>Alertness:</b>  <b>Orientation:</b>  <b>Distress:</b>  <b>Overall appearance:</b></p>	<p>Client appeared to be in slight discomfort and pain.  A &amp; O x3  Oriented to person, time, place, &amp; current events.  Client appears to be in moderate distress.  Client appeared to be in discomfort and looked to be in pain.</p>
<p><b>INTEGUMENTARY (2 points):</b>  <b>Skin color:</b>  <b>Character:</b>  <b>Temperature:</b>  <b>Turgor:</b>  <b>Rashes:</b>  <b>Bruises:</b>  <b>Wounds:</b> .   <b>Braden Score:</b>  <b>Drains present:</b> Y <input type="checkbox"/>      N <input checked="" type="checkbox"/>  <b>Type:</b></p>	<p>Caucasian/looked a little pale for race  Appeared hydrated and clean.  Warm  Normal turgor 2+  None noted  Slight bruising of the abdomen  4 small incisions in the abdomen due to laparoscopic cholecystectomy  17</p>
<p><b>HEENT (1 point):</b>  <b>Head/Neck:</b>  <b>Ears:</b>  <b>Eyes:</b>  <b>Nose:</b>  <b>Teeth:</b></p>	<p>Head and neck symmetrical, no bumps or lesions noted.  Ears are free of discharge, no bumps or lesions noted.  Eyes normal. Upon inspection sclera was white, cornea was clear, conjunctiva was white with no lesions or discharge noted.  Septum was midline with no drainage or bleeding noted.  The client had natural teeth on top and bottom.</p>
<p><b>CARDIOVASCULAR (2 points):</b>  <b>Heart sounds:</b>  <b>S1, S2, S3, S4, murmur etc.</b>  <b>Cardiac rhythm (if applicable):</b>  <b>Peripheral Pulses:</b></p>	<p>S1 and S2 heart sounds are normal with no murmurs or gallops present.  Pulse was 76 bpm radial  Capillary refill was between 3 and 4 seconds</p>

<p><b>Capillary refill:</b>  <b>Neck Vein Distention:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Edema</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Location of Edema:</b></p>	
<p><b>RESPIRATORY (2 points):</b>  <b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Breath Sounds: Location, character</b></p>	<p>Client has good lung sounds overall with positive crackles.          Client had no rhonchi or wheezes present.          Respirations were nonlabored.</p>
<p><b>GASTROINTESTINAL (2 points):</b>  <b>Diet at home:</b>  <b>Current Diet</b>  <b>Height:</b>  <b>Weight:</b>  <b>Auscultation Bowel sounds:</b>  <b>Last BM:</b>  <b>Palpation: Pain, Mass etc.:</b>  <b>Inspection:</b>              <b>Distention:</b>              <b>Incisions:</b>              <b>Scars:</b>              <b>Drains:</b>              <b>Wounds:</b>  <b>Ostomy:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Nasogastric:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>              <b>Size:</b>  <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>              <b>Type:</b></p>	<p>Regular diet at home          Full liquid diet with the plan to transition into soft foods later in the day          183 lb.          Bowel sounds hypoactive          1 day ago          Client has slight pain in abdomen. The abdomen is distended and soft. The client has four small incisions from a laparoscopic cholecystectomy.</p>
<p><b>GENITOURINARY (2 Points):</b>  <b>Color:</b>  <b>Character:</b>  <b>Quantity of urine:</b>  <b>Pain with urination:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Dialysis:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Inspection of genitals:</b>  <b>Catheter:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>              <b>Type:</b>              <b>Size:</b></p>	<p>The client did not urinate while I was there. No urine output was recorded. Also, no inspection of the genitals was completed.</p>
<p><b>MUSCULOSKELETAL (2 points):</b>  <b>Neurovascular status:</b>  <b>ROM:</b>  <b>Supportive devices:</b>  <b>Strength:</b>  <b>ADL Assistance:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Fall Risk:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p>	<p>The client was in slight pain and was post-op from a laparoscopic cholecystectomy. The client did not get out of bed while I was there.          Strength was equal bilaterally in all extremities.          No supportive devices are needed.</p>

<p><b>Fall Score:</b>  <b>Activity/Mobility Status:</b>  <b>Independent (up ad lib)</b> <input checked="" type="checkbox"/>  <b>Needs assistance with equipment</b> <input type="checkbox"/>  <b>Needs support to stand and walk</b> <input type="checkbox"/></p>	<p>17                   Client is normally independent but was post-op surgery. The client did not get out of bed while I was there.</p>
<p><b>NEUROLOGICAL (2 points):</b>  <b>MAEW:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/>  <b>PERLA:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/>  <b>Strength Equal:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no -  <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input checked="" type="checkbox"/>  <b>Orientation:</b>  <b>Mental Status:</b>  <b>Speech:</b>  <b>Sensory:</b>  <b>LOC:</b></p>	<p>Moves both arms and legs equal bilaterally. Oriented to person, time, place, and current events.                  Mental status and speech were good.                  No glasses or contacts present.                  Alert and oriented x3</p>
<p><b>PSYCHOSOCIAL/CULTURAL (2 points):</b>  <b>Coping method(s):</b>  <b>Developmental level:</b>  <b>Religion &amp; what it means to pt.:</b>  <b>Personal/Family Data (Think about home environment, family structure, and available family support):</b></p>	<p>No deficits were noted.                  The client did not specify a religion.                  The client did not note any coping mechanisms.                  The client is single and lives by herself. The client is fully independent at home with no assistive devices. The client does have one child, but the client did not note if the child comes to visit or if the child helps out.</p>

**Vital Signs, 2 sets (5 points)**

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0845	79 bpm	134/85 right arm	18	98.5 oral	96% room air
0945	76 bpm	139/76 right arm	20	99.1 oral	98% room air

**Pain Assessment, 2 sets (2 points)**

Time	Scale	Location	Severity	Characteristics	Interventions
0845	1-10.	Abdomen	The client reported that	Achy and sore	I encouraged the client to

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			she is sore, and it hurts worse when she coughs. The client also reported her pain a 3 on a scale of 1-10.		hold a pillow over her abdomen every time she coughed. The client also received ketorolac intravenously.
0945	Client rated her pain a 7 on a scale of 1-10	Abdomen	The client reported that she is still sore and achy. The client also reported her pain a 7 on a scale of 1-10.	Achy and sore	I encouraged the client to continue to hold a pillow over her abdomen every time she coughed.

**IV Assessment (2 Points)**

<b>IV Assessment</b>	<b>Fluid Type/Rate or Saline Lock</b>
<b>Size of IV:</b> 20 gauge <b>Location of IV:</b> Left hand <b>Date on IV:</b> 11/04/2020 <b>Patency of IV:</b> patent, flushes easily, infusing <b>Signs of erythema, drainage, etc.:</b> No signs of erythema or drainage noted. <b>IV dressing assessment:</b> IV site looks clean and dry with no redness or irritation noted.	Sodium chloride 0.9% with KCl IV 40 mEq/L

**Intake and Output (2 points)**

<b>Intake (in mL)</b>	<b>Output (in mL)</b>
No intake was recorded on the client while I was there.	No output was recorded on the client while I was there.

**Nursing Care**

**Summary of Care (2 points)**

**Overview of care:** The client was post-op from a laparoscopic cholecystectomy. The client was given a one-time dose of vancomycin after surgery to prevent any infection from occurring and ketorolac for pain every six hours for forty-eight hours. The client was also on continuous sodium chloride 0.9% with potassium chloride intravenously to prevent dehydration and restore the client's electrolyte levels. The client rated her pain a three on a scale of one to ten at 0845 and a seven an hour later. The client uses no assistive devices and is independent. The client after surgery was on a full liquid diet with intentions of moving to soft foods later on in the day as tolerated. The client had her laparoscopic cholecystectomy on 11/05/2020 and plans to be discharged the next day on 11/06/2020.

**Procedures/testing done:** The client had a laparoscopic cholecystectomy, intraoperative cholangiogram, a CT of the abdomen and pelvis with and without contrast, a nuclear medicine hepatobiliary scan/HITA scan, a chest portable, and an obstructive series of the abdomen.

**Complaints/Issues:** The client had no issues or complaints.

**Vital signs (stable/unstable):** The client's vital signs were stable. Although the client did show some signs of being hypertensive.

**Tolerating diet, activity, etc.:** The client was on a full liquid diet post-op and would move to soft foods later in the day as tolerated.

**Physician notifications:** No notifications were presented at this time.

**Future plans for patient:** The client will continue to be monitored for any pain or bleeding up until discharge. The client will be taught how to take care of the incision sites and what to look for in case of an infection or the opening of an incision. The client will go back to a regular diet after being able to tolerate her full liquid and soft food diet.

**Discharge Planning (2 points)**

**Discharge location:** The client will be discharged to her home.

**Home health needs (if applicable):** The client refused any services for at home at this time.

**Equipment needs (if applicable):** The client will not need any additional equipment for home.

**Follow up plan:** The client will follow-up with her primary care provider within 10 days after discharge. The client will continue to monitor her pain, stools, and incisions once discharged and will call her provider if she experiences any significant pain or bleeding.

**Education needs:** The client will need education on how to properly clean her incision sites and what to watch for in case of an infection. The client should get education on a proper diet with the right balance of nutrition to help prevent further constipation.

**Nursing Diagnosis (15 points)**

**\*Must be NANDA approved nursing diagnosis and listed in order of priority\***

<p><b>Nursing Diagnosis</b></p> <ul style="list-style-type: none"> <li>• Include full nursing diagnosis with “related to” and “as evidenced by” components</li> </ul>	<p><b>Rational</b></p> <ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul>	<p><b>Intervention (2 per dx)</b></p>	<p><b>Evaluation</b></p> <ul style="list-style-type: none"> <li>• How did the patient/family respond to the nurse’s actions?</li> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul>
<p>1. Postoperative acute pain related to laparoscopic cholecystectomy as evidenced by reports of pain.</p>	<p>This client had a laparoscopic cholecystectomy after being diagnosed with cholecystitis. The client also reported her pain a three on a scale of one to ten and an hour later reported it a seven</p>	<p>1. Assess the client’s pain description of pain such as quality, nature, and severity of pain at least twice an eight-hour shift. 2. Administer pain medication</p>	<p>The client was given ketorolac for pain every six hours. The client’s pain was assessed every hour while I was there. The client had rated her pain a three on a scale of one to ten and a seven an hour later. After rating her pain, a seven she was given ketorolac. The client was checked on</p>

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	on a scale of one to ten.		thirty minutes later and reported mild discomfort from her incision sites and stated, "My abdomen still feels sore." Overall, the client responded well, and her goals were mostly met.
2. Risk for infection related to breakage in the skin as evidenced by laparoscopic cholecystectomy.	The client had a laparoscopic cholecystectomy which involves the client having to have four small incisions made in her abdomen. Therefore, it caused a breakage in the skin putting the client at risk for infection.	<ol style="list-style-type: none"> <li>1. Maintaining sterile technique hen changing dressings and providing any kind of incision site care.</li> <li>2. Inspect incision sites at least once every eight-hour shift. Document any signs of local inflammation and infection and changes in character wound drainage,</li> </ol>	The client was given a one-time dose of vancomycin post-op to help prevent any infection. The client was given education on what to look for in case of an infection. The client understood the education. The dressings were checked once an hour while I was there and showed no new signs of bleeding or infection. The dressings were not changed or taken off while I was there. Overall goals were met.
3. Sedentary lifestyle related to constipation as evidenced by fecal impaction.	The client came into the emergency department with a complaint of abdominal and back pain. The primary diagnosis was fecal impaction. Fecal impaction is caused by chronic constipation. The client also lives alone and does not get out or do much.	<ol style="list-style-type: none"> <li>1. The client will be educated on the proper exercise and lifestyle modifications to help prevent further constipation.</li> <li>2. Advise the client to drink 2 to 3 liters a day to maintain adequate fluid intake</li> </ol>	The client will try to be more mobile once discharged. The client will be educated on adding more fiber into her diet. The client was on continuous sodium chloride 0.9% with potassium chloride intravenously while at the hospital to maintain adequate fluid intake and improve electrolyte levels. The client did drink quite a bit of water while I was there and will continue to try to drink plenty of fluids at home once discharged. Overall, the goals were mostly

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			met.
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**Other References (APA):**

Vera, M. B. (2019a, April 10). *4 Cholecystitis and Cholelithiasis Nursing Care Plans*.

Nurseslabs. <https://nurseslabs.com/4-cholecystitis-cholelithiasis-nursing-care-plans/2/>

Vera, M. B. (2019b, June 1). *12 Cholecystectomy Nursing Care Plans*. Nurseslabs.

<https://nurseslabs.com/cholecystectomy-nursing-care-plans/10/>

Vera, M. B. (2020, September 6). *Risk for Infection Nursing Care Plan*. Nurseslabs.

<https://nurseslabs.com/risk-for-infection/>

**Concept Map (20 Points):**

### Nursing Diagnosis/Outcomes

#### Subjective Data

The client rated her pain a 3 on a scale of one to ten at 0845.  
 The client rated her pain a seven on a scale of one to ten at 0945.  
 The client stated, "the pain feels sort of achy and sharp".  
 The client stated, "I started having pain the night before I called 9-1-1 for help and it has been constant since then."  
 The client stated. "moving around and deep breathing made the pain worse."

#### Objective Data

Diagnosis: fecal impaction and cholecystitis  
 Most recent vital signs: B/P - 139/76  
 Pulse - 76 bpm radial  
 RR - 20  
 Temp - 99.1 oral  
 O2 - 98% room air  
 Blood culture and urine culture came back negative with no growth.  
 Urinalysis came up mostly normal with urine looking clear with no odor present, but the urinalysis did show a trace of proteins.  
 Hct, K+, BUN, albumin, PTT, and BNP were all decreased.  
 Monocytes, alk phos, AST, ALT, INR, and PT were all elevated.

#### Patient Information

On October 29, a 63-year-old white, single, female, called 9-1-1 with a chief complain of abdominal and back pain. The client was brought into the emergency department at Iroquois Memorial Hospital by ambulance and was later admitted that night for a fecal impaction and cholecystitis. The client has a past medical history of fecal impaction, colitis, irritable bowel syndrome, peptic ulcers, GERD, seasonal allergic rhinitis, vertigo, gastritis, essential hypertension, thoracic back pain, low back pain, and shoulder pain. The client is currently taking multiple medications including vancomycin and ketorolac. The client is also on continuous fluids to maintain adequate fluid intake and improve electrolyte levels.

#### 1. Postoperative acute pain related to laparoscopic cholecystectomy as evidenced by reports of pain.

- The client was given ketorolac for pain every six hours. The client's pain was assessed every hour while I was there. The client had rated her pain a three on a scale of one to ten and a seven an hour later. After rating her pain, a seven she was given ketorolac. The client was checked on thirty minutes later and reported mild discomfort from her incision sites and stated, "My abdomen still feels sore." Overall, the client responded well, and her goals were mostly met.

#### 2. Risk for infection related to breakage in the skin as evidenced by laparoscopic cholecystectomy.

- The client was given a one-time dose of vancomycin post-op to help prevent any infection. The client was given education on what to look for in case of an infection. The client understood the education. The dressings were checked once an hour while I was there and showed no new signs of bleeding or infection. The dressings were not changed or taken off while I was there. Overall goals were met.

#### 3. Sedentary lifestyle related to constipation as evidenced by fecal impaction.

- The client will try to be more mobile once discharged. The client will be educated on adding more fiber into her diet. The client was on continuous sodium chloride 0.9% with potassium chloride intravenously while at the hospital to maintain adequate fluid intake and improve electrolyte levels. The client did drink quite a bit of water while I was there and will continue to try to drink plenty of fluids at home once discharged. Overall, the goals were mostly met.

#### Nursing Interventions

1. Assess the client's pain description of pain such as quality, nature, and severity of pain at least twice an eight-hour shift.
  2. Administer pain medication
- 
1. Maintaining sterile technique when changing dressings and providing any kind of incision site care.
  2. Inspect incision sites at least once every eight-hour shift. Document any signs of local inflammation and infection and changes in character wound drainage,
- 
1. The client will be educated on the proper exercise and lifestyle modifications to help prevent further constipation.
  2. Advise the client to drink 2 to 3 liters a day to maintain adequate fluid intake

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