

### Medication

**Heparin injection 5000 units (3 times per day): To prevent or treat blood clots.**  
 Pharmacologic class: Anticoagulant (Jones & Bartlett Learning, 2021)  
 Therapeutic class: Anticoagulant (Jones & Bartlett Learning, 2021)  
 Nursing assessment: assess for allergies to anticoagulants. Assess for bleeding risk. Obtain CBC, PT/INR, and aPTT. (Jones & Bartlett Learning, 2021)

**Insulin (Humulin; NovoLIN) 2-12 units (4 times daily): To control blood sugar.**  
 Pharmacologic class: Human insulin (Jones & Bartlett Learning, 2021)  
 Therapeutic class: Antidiabetic (Jones & Bartlett Learning, 2021)  
 Nursing assessment: Check the client's blood sugar, and have another nurse check the type of insulin and units to reduce potential errors. (Jones & Bartlett Learning, 2021)

**Losartan (Cozaar) 25 mg (Daily): To manage hypertension.**  
 Pharmacologic class: Angiotensin II receptor blocker (ARB) (Jones & Bartlett Learning, 2021)  
 Therapeutic class: Antihypertensive (Jones & Bartlett Learning, 2021)  
 Nursing assessment: Assess the client's vital signs, assess any muscle or back pain to rule out musculoskeletal pathology, and monitor blood pressure and renal function. (Jones & Bartlett Learning, 2021)

**Metoclopramide hydrochloride (Reglan) 5 mg (3 times daily): To prevent nausea and vomiting.**  
 Pharmacologic class: Dopamine - 2 receptors (Jones & Bartlett Learning, 2021)  
 Therapeutic class: Antiemetic, upper GI (Jones & Bartlett Learning, 2021)  
 Nursing assessment: Assess for suicidal ideation prior to administering this medication because of the increased risk of suicidal ideation. Assess blood pressure. (Jones & Bartlett Learning, 2021)

**Pantoprazole (Protonix) 40 mg (Daily): To treat GERD.**  
 Pharmacologic class: Proton pump inhibitor (Jones & Bartlett Learning, 2021)  
 Therapeutic class: Antilulcer (Jones & Bartlett Learning, 2021)  
 Nursing assessment: assess for abdominal tenderness, distention, rebounding, or guarding. Obtain a baseline assessment of your client, including vital signs, neurological status, respiratory status, and gastrointestinal symptoms like diarrhea and constipation. (Jones & Bartlett Learning, 2021)

**Senna Docusate (Senokot) 8.6-50 mg (Daily): To prevent or treat occasional constipation.**  
 Pharmacologic class: Stimulant laxatives (Jones & Bartlett Learning, 2021)  
 Therapeutic class: Stimulant laxatives (Jones & Bartlett Learning, 2021)  
 Nursing assessment: assess for abdominal discomfort, distention, and decreased bowel sounds, assess for vomiting or inflammatory bowel disease. (Jones & Bartlett Learning, 2021)

### Demographic Data

**Date of Admission: 02/08/2023**  
**Admission Diagnosis/Chief Complaint: Vomiting, Abdominal pain/ Tenderness**  
**Age: 55**  
**Gender: Male**  
**Race/Ethnicity: Black/ African American**  
**Allergies: Metformin**  
**Code Status: Full Code**  
**Height in cm: 160 cm**  
**Weight in kg: 67.8 kg**  
**Psychosocial Developmental Stage: Integrity vs Despair**  
**Cognitive Developmental Stage: Formal Operational Stage**  
**Braden Score: 22**  
**Morse Fall Score: 17**  
**Infection Control Precautions: Standard Precautions**

### Pathophysiology

Disease process: Our stomachs have a protective lining called the mucosa. This lining protects the stomach from the strong acid inside of it that helps to digest food (Mayo Clinic, 2022). When bacteria damages, or weakens this lining, it becomes inflamed causing gastritis (Mayo Clinic, 2022). Gastritis is described as an inflammation of the mucosa or lining of the stomach (Mayo Clinic, 2022). The most common cause of this condition is a bacteria called Helicobacter Pylori or H. Pylori (Mayo Clinic, 2022). This bacterium is commonly found in our stomach and can cause the stomach to produce more acid which in turn causes damage to the stomach lining and can lead to ulcers (Mayo Clinic, 2022). There are two types of gastritis, acute and chronic. Acute refers to a sudden onset of inflammation causing the lining of the stomach to appear reddened, and specimens collected during an endoscopy shows a lot of inflammatory leukocytes (Mayo Clinic, 2022). Sometimes there is some erosion and small areas of bleeding (Mayo Clinic, 2022). Some causes of acute gastritis are taking too much NSAIDs like aspirin, poisons, alcohol, and H. Pylori. Chronic gastritis develops over time, the mucosa becomes thinner as the normal healthy cells are destroyed (Mayo Clinic, 2022). When this condition is present for many years it can progress to metaplasia with an increased risk of gastric cancer (Mayo Clinic, 2022). Some causes of chronic gastritis include H. Pylori, auto-immune diseases like HIV/AIDS, and Crohn's disease (Mayo Clinic, 2022).

S/S of disease: some signs and symptoms of gastritis include a feeling of fullness in your upper abdomen after eating (Cleveland Clinic, 2023). Burning, aching, or pain that may become worse or better with eating (Cleveland Clinic, 2023). Nausea and vomiting are also common symptoms of gastritis (Cleveland Clinic, 2023). Many people with gastritis don't have symptoms and when they do, they mistake them for indigestion (Cleveland Clinic, 2023). Some other more serious signs of this condition are vomiting blood, losing weight without trying to, bloating, and black tarry stool (Cleveland Clinic, 2023). If gastritis is left untreated it could cause serious problems like anemia, it will cause sores in the stomach that bleed which lowers the red blood count (anemia). It can also affect how the body absorbs vitamin B12 causing pernicious anemia (Cleveland Clinic, 2023). Another thing that untreated gastritis can cause is peritonitis, which is when ulcers break through the stomach wall and spill the stomach contents into the abdomen (Cleveland Clinic, 2023). When this happens bacteria spread causing a dangerous infection that leads to sepsis which can be fatal (Cleveland Clinic, 2023). It will also cause growths in the lining of the stomach that increases the risk of stomach cancer.

Method of Diagnosis: To diagnose this condition your provider will ask questions about your symptoms and history as well as perform an exam. The provider may also order some blood work to check for antibody titers that fight H. Pylori bacteria (Cleveland Clinic, 2023). A stool sample may also be ordered to check for H. Pylori in the stool. Lastly, the provider may order an esophagogastroduodenoscopy (EGD), it's a procedure where they insert a long thin tube down the esophagus to the stomach (Cleveland Clinic, 2023). This allows the provider to examine the stomach and take a tissue sample from the lining of the stomach to test for infection (Cleveland Clinic, 2023).

Treatment of disease: treatment of gastritis depends on the specific cause. Acute gastritis caused by anti-inflammatory drugs or alcohol may be relieved by stopping the use of those substances (Cleveland Clinic, 2023). Other treatments include antibiotic medications that will kill the bacteria, you may have to take multiple antibiotics for a couple of weeks. The provider may also recommend taking antacids to reduce stomach acid and treat heartburn. Histamine (H2) blockers and proton pump inhibitors decrease production and the amount of acid your stomach produces (Cleveland Clinic, 2023). Proton pump inhibitors also treat stomach ulcers and gastroesophageal reflux disease (GERD) (Cleveland Clinic, 2023).

### Lab Values/Diagnostics

**Creatinine, Blood: 1.55 mg/dL**  
 Normal: 0.6 - 1.2 mg/dL  
 Reason for abnormal: Due to possible poor kidney function

**Bun: 24 mg/dL**  
 Normal: 12 - 20 mg/dL  
 Reason for abnormal: Due to possible dehydration

**Glucose: 183 mg/dL**  
 Normal: 70 - 90 mg/dL  
 Reason for abnormal: The client has diabetes mellitus.

**Red Blood Cells: 4.33**  
 Normal: 4.40 - 5.80  
 Reason for abnormal: Due to possible anemia

**Hemoglobin: 8.8 g/dL**  
 Normal: 13.0 - 16.5  
 Reason for abnormal: Due to possible anemia

**Hematocrit 27.5%**  
 Normal: 38.0% - 50.0%  
 Reason for abnormal: Due to possible anemia

**Diagnoses**  
**CT Abdomen**  
 No small bowel obstruction was seen. Diverticulosis of descending colon was noted. No definite diverticulitis was noted. Thickening of the wall of the urinary bladder was noted.  
**Reason:** The client has been vomiting for 3 days and cannot keep fluid or food down.

**XR Abdomen**  
 The bowel gas pattern is unremarkable.  
**Reason:** The client has been vomiting for 3 days and can not keep fluid or food down.

**Esophagogastroduodenoscopy (EGD)**  
**Showed mild antral gastritis and a fundic nodule. No ulcers**  
**Reason:** To investigate symptoms of abdominal pain.

**Colonoscopy**  
**Only to 60 cm, very poor prep. The client had diverticulosis in the sigmoid colon. He needs another day of prep.**  
**Reason:** To investigate intestinal signs and symptoms.

### Admission History

The patient is a 55-year-old male with a PMHx of insulin-dependent diabetes, gastroparesis, cholecystectomy, HTN, and anemia. He presents to the hospital for vomiting and abdominal pain since last Thursday 02/02/2023. The pain is in his right upper abdomen and has been constant. The abdomen is tender to touch and the client states that it "feels like a cramping pain". The client said eating and drinking make symptoms worse due to vomiting afterward which causes more abdominal pain. No diarrhea. No blood in vomit or stool. He has been taking insulin at home and hasn't taken any medication to treat his current symptoms. The client's wife brought him in for further evaluation.

### Medical History

**Previous Medical History:** Diabetes mellitus type 2 nonobese (HCC), gastroparesis, and hypertension.

**Prior Hospitalizations:** Diabetic Ketoacidosis (06/22/2021), Dehydration (11/09/2021), Microcytic anemia (02/05/2023), Vomiting (02/08/2023).

**Previous Surgical History:** The client has a past surgical history that includes cholecystectomy and gall bladder surgery.

**Social History:** Smoking: Reports that he quit smoking about 21 years ago, and never used smokeless tobacco.  
Alcohol: Denies drinking alcohol.  
Drugs: Denies using any substances.

### Active Orders

**Diet NPO for testing/procedure EGD/Colonoscopy:** To reduce the risk of aspiration, don't eat solid foods the day before the colonoscopy instead consume clear liquids.

**CBC w/ differential:** To monitor the client's blood levels while on anticoagulants.

**Comprehensive metabolic panel (CMP):** To check blood sugar levels.

**Pulse Oximetry:** To maintain the client's oxygenation.

**Admission weight routine:** (Routine) monitoring client status.

**Telemetry monitoring:** To track heart rhythms.

**Vital Signs:** (Routine) monitoring client status.

**Intake & Output:** (Routine) monitoring client for risk of fluid deficit.

## Physical Exam/Assessment

**General:** Patient is alert and oriented to person, place, time, and situation. The patient is well-groomed and in no acute distress.

**Integument:** Skin color is light brown. Skin is warm and dry. No rashes, or bruising. Skin turgor normal mobility. Capillary refill less than 3 seconds fingers and toes.

**HEENT: Head:** Patient born with Klippel - Feil Syndrome, this is when two or more vertebrae in the neck fuse together. This is normal for this client. The hair is thin and grey. **Neck:** Symmetrical, trachea is midline without deviation, the thyroid gland is non-palpable, and no noted nodules. Bilateral carotid pulses are palpable 2+. No lymphadenopathy in the head or neck was noted. **Eyes:** Bilateral sclera is white, bilateral corneas are clear, bilateral conjunctivas are light pink, with no visible drainage from both eyes, and bilateral eyelids are moist and pink without lesions or discharge. **PERRLA** is intact bilaterally. **EOM** intact bilaterally. The client is wearing eyeglasses. **Ears:** Bilateral auricles show no visible lesions, lumps, or deformities. **Mouth/Throat:** Pink and moist gums. The dentition is white, smooth, and complete, with no dentures. **Nose:** The nose is midline with no signs of lumps, rashes, lesions, or deformities.

**Cardiovascular:** Clear S1 and S2 without murmurs gallops or rubs. Normal cardiac rate and rhythm. Upper and lower extremities peripheral pulses 3+ bilaterally. Capillary refills less than 3 seconds on both fingers and toes bilaterally. No edema on both upper and lower extremities.

**Respiratory:** Normal rate and pattern of respirations. Respirations are symmetrical and non-labored. Lung sounds are clear throughout anterior and posterior bilaterally, with no wheezes, crackles, or rhonchi noted.

**Genitourinary:** urine is clear and yellow, no pain with urination. Times 2 occurrences.

**Gastrointestinal:** The patient eats a regular diet. Bowel sounds are normoactive in all four quadrants. The abdomen is soft, and tenderness is noted in the left and right upper quadrants. The patient states this is due to vomiting for 3 days.

**Musculoskeletal:** All extremities have a full range of motion. Hand grips demonstrate 3/5 bilaterally. Right and left pedal push and pulls demonstrate equal strength 5/5 bilaterally.

**Neurological:** Patient is alert and awake and responds to questions. Oriented to person, place, time, and situation. The client's speech is clear.

**Most recent VS (include date/time and highlight if abnormal):**

8:15 am Temp: 97 Blood pressure: 152/125 Pulse: 70 O2: 100% Respirations: 18  
11:00 am Temp: 97.2 Blood pressure: 133/66 Pulse: 66 O2: 97% Respirations: 22

**Pain and pain scale used:**

8:15 am The patient rates pain at a zero out of ten on the numeric scale.  
11:00 am The patient rates pain at a zero out of ten on the numeric scale.

<p style="text-align: center;"><b>Nursing Diagnosis 1</b></p> <p>Risk for fluid volume deficit related to inadequate fluid intake as evidenced by vomiting.</p>	<p style="text-align: center;"><b>Nursing Diagnosis 2</b></p> <p>Risk for unstable blood glucose levels related to diabetic ketoacidosis as evidenced by a blood glucose of 183.</p>	<p style="text-align: center;"><b>Nursing Diagnosis 3</b></p> <p>Acute pain related to inflammatory process as evidenced by reports of abdominal pain/tenderness.</p>
<p style="text-align: center;"><b>Rationale</b></p> <p>The client hasn't been able to keep food or fluids down for 3 days.</p>	<p style="text-align: center;"><b>Rationale</b></p> <p>The client doesn't check blood glucose levels regularly.</p>	<p style="text-align: center;"><b>Rationale</b></p> <p>The client comes to the hospital with reports of vomiting and abdominal pain/tenderness.</p>
<p style="text-align: center;"><b>Interventions</b></p> <p><b>Intervention 1:</b> Assess the client's skin turgor and mucous membranes for signs of dehydration.</p> <p><b>Intervention 2:</b> Assess the volume and frequency of vomiting.</p>	<p style="text-align: center;"><b>Interventions</b></p> <p><b>Intervention 1:</b> Assess the client for symptoms of low serum glucose level.</p> <p><b>Intervention 2:</b> Monitor for signs and symptoms of hyperglycemia.</p>	<p style="text-align: center;"><b>Interventions</b></p> <p><b>Intervention 1:</b> Antibiotics for the infectious process. Pain medications to treat acute pain symptoms.</p> <p><b>Intervention 2:</b> Provide a clear liquid or soft diet to enable the bowels to rest and reduce inflammation.</p>
<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>Client fluid volume remains adequate. The client's skin turgor is elastic.</p>	<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The client has glucose readings within the prescribed range.</p>	<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The client states satisfaction with the pain management regimen.</p>

**References (3) (APA):**

Clinic, C. (2020). *Gastritis: Indigestion, symptoms, causes, treatment, diagnosis*. Cleveland Clinic. Retrieved February 17, 2023, from <https://my.clevelandclinic.org/health/diseases/10349-gastritis>

Clinic, M. (2022, March 15). *Gastritis*. Mayo Clinic. Retrieved February 17, 2023, from <https://www.mayoclinic.org/diseases-conditions/gastritis/symptoms-causes/syc-20355807#:~:text=Gastritis%20is%20a%20general%20term,use%20of%20certain%20pain%20relievers>.

Jones & Bartlett Learning. (2021). *2022 Nurse's Drug Handbook* (Jones & Bartlett Learning, Ed.). Jones & Bartlett Learning.

Pagana, T. J., Pagana, T. N., & Pagana, K. D. (2021). *Mosby's® Manual of Diagnostic and Laboratory Tests* (7th ed.). Elsevier - Health Sciences Division.