N431 Care Plan # 2

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	Client Initials	Age	Gender
3-31-23	T.P.	60 years old	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Elementary School Teacher	Married	Shellfish, Iodine
Code Status	**Height**	**Weight**	
Full Code	66 inches	63.64 kg	

Medical History (5 Points)

Past Medical History: Atrial Fibrillation

Past Surgical History: Open reduction and internal fixation, left foot repair (2017)

Family History: Mother – diabetes, Father – chronic kidney failure, Type 2 diabetes, Brother – Hypertension, Sister – deceased s/p ischemic stroke

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): Patient denies tobacco and drug use. Patient drinks 1 glass of wine on Saturday nights with her dinner and has done this for 25 years.

Assistive Devices: Patient denies use of assisted devices.

Living Situation: Patient lives at home with her husband.

Education Level: The patient has a bachelor's degree in early childhood education.

Admission Assessment

Chief Complaint (2 points): Bloody stool this AM.

History of Present Illness – OLD CARTS (10 points):

The 60-year-old patient came to the ED on 4-3-23 for blood in her stool. She stated that "she went to have a bowel movement and upon standing, she became dizzy and noticed there was blood in her stool." The husband then brought her straight to the ED. The patient did not

notice any aggravating or relieving factors. The patient has also never been treated for this before.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Gastrointestinal Bleeding

Secondary Diagnosis (if applicable): N/A

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

The patient came into the ED with blood in her stool resulting from gastrointestinal bleeding. There are two categories for gastrointestinal bleeding: upper and lower sources of bleeding. The suspensory ligament separates the difference between the two. "This peritoneal structure suspends the duodenojejunal flexure from the retroperitoneum" (DiGregorio & Alvey, 2022, para 1). Where the bleeding is located determines whether the symptoms include hematemesis or melena. There was no information regarding the cellular level of gastrointestinal bleeding. The patient tested positive for occult blood. The signs of gastrointestinal bleeding are abdominal cramping, dark-colored poop, pale appearance, shortness of breath, tiredness, vomiting blood, weakness, and fatigue (Cleveland Clinic, 2023, para 4). The patient had symptoms such as dizziness when standing up from the toilet. Blood pressure usually results in hypotension, and the heart rate is tachycardia due to active bleeding. Respirations will usually be within normal range or tachypnea. The patient had stable vital signs during the clinical period. Laboratory findings will include decreased hemoglobin, hematocrit, and platelets which the patient all had. Several diagnostic studies can be used to diagnose gastrointestinal bleeding. These studies include blood tests, fecal occult blood tests, CT scans, GI x-rays, upper endoscopy, balloon enterostomy, colonoscopy, and sigmoidoscopy (Cleveland Clinic, 2023, para 8).

The patient I was caring for had a fecal occult blood test, which came back positive. Treatment options for gastrointestinal bleeding include nothing by mouth, supplemental oxygen if the patient is hypoxic, IV fluid resuscitation, and blood type and crossmatch (DiGregorio & Alvey, 2022, para 12). Patients can also receive RBC and platelet transfusions (DiGregorio & Alvey, 2022, para 12). There are also medications the patient can receive depending on the cause of the bleeding. The last resort would include surgery. If the least invasive alternatives don't work, surgery will be indicative. The patient had a transfusion of PRBCs and vitamin K due to decreased hemoglobin.

Pathophysiology References (2) (APA):

DiGregorio, A. M., & Alvey, H. (2022). *Gastrointestinal bleeding.* National Library of Medicine. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK537291/

Gastrointestinal (GI) bleeding. Cleveland Clinic. (2023). Retrieved from https://my.clevelandclinic.org/health/diseases/23391-gastrointestinal-gi-bleeding

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	"4.28-5.56 trillion cells/L" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Hgb	"13.0-17.0 g/dL"	N/A	9.5 g/dL	This patient's hemoglobin is low due to current gastrointestinal bleeding.

	(Capriotti & Frizzell, 2020).			The patient is also taking warfarin which can increase the risk for bleeding (Mayo Clinic, 2020, para 3).
Hct	"35%-47%" (Capriotti & Frizzell, 2020).	N/A	28%	This patient's hematocrit is low due to current gastrointestinal bleeding. The patient is also taking warfarin which can increase the risk for bleeding (Mayo Clinic, 2020, para 3).
Platelets	"149,000-393,000 billion/L" (Capriotti & Frizzell, 2020).	N/A	101,000 billion/L	The body isn't making enough blood cells in the bone marrow due to temporary anemia. Thrombocytopenia can increase the risk of bleeding in the GI tract (Laine, 2018, para 2).
WBC	"4,000-11,000 cells/mcL" (Capriotti & Frizzell, 2020).	N/A	9.8 cells/mcL	N/A
Neutrophils	"45%-75%" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Lymphocytes	"20%-40%" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Monocytes	"1.0%-10.0%" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Eosinophils	"1% to 4%" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Bands	"0% to 3%" (Capriotti &	N/A	N/A	N/A

	Frizzell, 2020).			

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-	"135-145 mmol/L" (Capriotti & Frizzell, 2020).	N/A	139 mmol/L	N/A
K+	"3.5-5.1 mmol/L" (Capriotti & Frizzell, 2020).	N/A	3.6 mmol/L	N/A
Cl-	"98-107 mEq/L" (Capriotti & Frizzell, 2020).	N/A	106 mEq/L	N/A
CO2	"21-31 mmol/L" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Glucose	"74-109 mg/dL" (Capriotti & Frizzell, 2020).	N/A	147 mg/dL	The patient's family has a history of diabetes. "A person with a fasting blood glucose greater than 125 mg/dL on more than one occasion usually receives a diabetes diagnosis – typically Type 2 diabetes" (Cleveland Clinic, 2023, para 8). The patient's body is becoming insulin resistant during this time and would need further evaluation.

BUN	"7-25 mg/dL" (Capriotti & Frizzell, 2020).	N/A	15 mg/dL	N/A
Creatinine	"0.70-1.30 mg/dL" (Capriotti & Frizzell, 2020).	N/A	0.9 mg/dL	N/A
Albumin	"3.5-5.2 g/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Calcium	"8.6-10.3 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Mag	"1.6-2.4 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Phosphate	"34-104 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Bilirubin	"0.3-1.0 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Alk Phos	"34-104 IU/L" (Capriotti & Frizzell,	N/A	N/A	N/A

	2020).			
AST	“13-39 U/L” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
ALT	“7-52 U/L” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Amylase	“30-220 U/L” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Lipase	“0-160 U/L” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Lactic Acid	“0.5-2.0 mg/dL” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Troponin	“0.0-0.04 ng/mL” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
CK-MB	“5-25 units/L” (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Total CK	“30-223 IU/L” (Capriotti & Frizzell, 2020).	N/A	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	"0.86-1.14 seconds" (Capriotti & Frizzell, 2020).	N/A	4.0 seconds	The patient is taking warfarin daily to prevent blood clots. When taking warfarin, it will slow down the time it takes your blood to clot. INR level will then increase the risk for bleeding (MyHealth.Alberta.ca, 2023, para 2).
PT	"11.9-15.0 seconds" (Capriotti & Frizzell, 2020).	N/A	16 seconds	The patient is taking warfarin daily to prevent blood clots. When taking warfarin, it will slow down the time it takes your blood to clot which is shown in the results of PT. INR level, which is the result of the PT, will then increase the risk for bleeding (MyHealth.Alberta.ca, 2023, para 2).
PTT	"22.6-35.3 seconds" (Capriotti & Frizzell, 2020).	N/A	60 seconds	The patient has a slower reacting time to clot which increases the chance for bleeding. The patient could also be lacking Vitamin K and platelets to help with clotting (Holm, 2018, para 3).
D-Dimer	"0.0-0.4 ng/mL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
BNP	"0-100 pg/mL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
HDL	">60 mg/dL" (Capriotti & Frizzell,	N/A	N/A	N/A

	2020).			
LDL	"<130 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Cholesterol	"<200 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Triglycerides	"<150 mg/dL" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Hgb A1c	"4.0%-5.9%" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
TSH	"0.4-4.0 U/mL" (Capriotti & Frizzell, 2020).	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	"Yellow and clear" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
pH	"5.0-8.0" (Capriotti	N/A	N/A	N/A

	& Frizzell, 2020).			
Specific Gravity	"1.005-1.035" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Glucose	"Negative" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Protein	"Negative" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Ketones	"Negative" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
WBC	"<5" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
RBC	"0-3" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
Leukoesterase	"Negative" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A

Arterial Blood Gas 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

pH	"7.35-7.45" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
PaO2	"80-100 mmHg" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
PaCO2	"35-45 mmHg" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
HCO3	"22-26 mEq/L" (Capriotti & Frizzell, 2020).	N/A	N/A	N/A
SaO2	"95%-100%" (Capriotti & Frizzell, 2020).	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	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	Positive	The culture showed the patient was

				positive for blood in her stool. This test helps to see if there is a bacterial infection in the intestines (Capriotti & Frizzell, 2020).

Lab Correlations Reference (1) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* (2nd ed.). F.A. Davis Company.

High INR test result: Care instructions. MyHealth.Alberta.ca. (2023). Retrieved from https://myhealth.alberta.ca/Health/aftercareinformation/pages/conditions.aspx?hwid=abq3244#:~:text=A%20high%20INR%20level%20can,This%20raises%20your%20INR%20level.

Holm, G. (2018). *Partial thromboplastin time (PTT) test*. Healthline. Retrieved from https://www.healthline.com/health/partial-thromboplastin-time-ptt

Hyperglycemia. Cleveland Clinic. (2023). Retrieved from https://my.clevelandclinic.org/health/diseases/9815-hyperglycemia-high-blood-sugar

Laine, L. (2018). *Treatment of thrombocytopenic patients with GI bleeding*. Gastrointestinal Endoscopy. Retrieved from https://www.giejournal.org/article/S0016-5107(18)30195-0/fulltext

Mayo Foundation for Medical Education and Research. (2020). *Gastrointestinal bleeding*. Mayo Clinic. Retrieved from https://www.mayoclinic.org/diseases-conditions/gastrointestinal-bleeding/symptoms-causes/syc-20372729

Diagnostic Imaging

All Other Diagnostic Tests (5 points): The patient had a chest x-ray and an EKG done.

Diagnostic Test Correlation (5 points):

The patient had an EKG done due to the patient's history of atrial fibrillation. The patient is on off-site, continuous monitoring. The EKG is used to visualize the electrical activity of the heart. The EKG showed sinus tachycardia without ectopy.

The patient had a chest x-ray done as well. This test was done to look for complications from atrial fibrillation. The chest x-ray showed negative for any acute abnormalities. The patient's cardiac silhouette is within normal limits. The chest x-ray "produces images of your heart, lungs, blood vessels, airways, and bones of your chest and spine" (Mayo Clinic, 2022, para 1).

Diagnostic Test Reference (1) (APA):

Mayo Foundation for Medical Education and Research. (2022). *Chest X-rays*. Mayo Clinic. Retrieved from https://www.mayoclinic.org/tests-procedures/chest-x-rays/about/pac-20393494#:~:text=Chest%20X%2Drays%20produce%20images,or%20air%20surrounding%20a%20lung.

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

<u>Docusate, polyethylene glycol, and D5NS are hospital medications.</u>

Brand/	warfarin/	PrimaCare/	Colace/	Bisacodyl/	Glutose-

Generic	Coumadin	multivitamin	docusate	polyethylene glycol	5/D5NS
Dose	10 mg	1 tablet	100 mg	17 g	75 mL/hr
Frequency	Daily	Daily	BID/PRN	Daily/PRN	Continuous until further notice by the provider.
Route	PO	PO	PO	PO	IV
Classification	Pharmacological: "Coumarin derivative" (Nurse's Drug Handbook, 2021, p. 1380). Therapeutic: "Anticoagulant" (Nurse's Drug Handbook, 2021, p. 1380).	Pharmacological class: "Vitamins" (Drugs.com, 2023, para 1). Therapeutic class: "Minerals" (Drugs.com, 2023, para 1).	Pharmacological class: "Emollient laxatives" (Osmosis from Elsevier, 2023, p. 2). Therapeutic class: "Laxative" (Osmosis from Elsevier, 2023, p. 2).	Pharmacological class: "Osmotic laxatives" (Osmosis from Elsevier, 2023, p. 1). Therapeutic class: "Laxative" (Osmosis from Elsevier, 2023, p. 1).	Pharmacological clas: "Hemodialysis" (Drugs.com, 2023, para 1). Therapeutic class: "Electrolyte replacement" (Drugs.com, 2023, para 1).
Mechanism of Action	"Interferes with the liver's ability to synthesize vitamin K-dependent clotting factors, depleting clotting factors II (prothrombin), VII, IX, and X. This	"Multivitamins are a combination of many different vitamins that are normally found in foods and other natural sources. Multivitamins are used to provide vitamins that are not taken in	"Docusate was added directly to the jejunum based on calcult3edconcetrations of docusate in the jejunum. At this concentration, there was an increase in secretion of water, sodium,	"Osmotic laxatives contain substances that are poorly absorbable and draw water into the lumen of the bowel. Polyethylene glycol functions is an osmotic laxative that	"Sodium and chloride – major electrolytes of the fluid compartment outside of cells – work together to control extracellul

	action, in turn, interferes with the clotting cascade. By depleting vitamin K-dependent clotting factors and interfering with the clotting cascade, warfarin prevents coagulation" (Nurse's Drug Handbook, 2021, p. 1380).	through the diet. Multivitamins are also used to treat vitamin deficiencies (lack of vitamins) caused by illness, pregnancy, poor nutrition, digestive disorders, and many other conditions" (Drugs.com, 2023, para 2).	chloride, and potassium as well as a decrease in absorption of glucose and bicarbonate. Based on in vitro data, the authors suggested this effect was due to an increase in intracellular cyclic AMP either directly through docusate or E series prostaglandins" (Drugs.com, 2023, para 17).	causes increased water retention in the lumen of the colon by binding to water molecules, thereby producing loose stools" (Drugs.com, 2023, para 14).	ar volume and blood pressure. Disturbances in sodium concentrations in the extracellular fluid are associated with disorders of water balance" (Drugs.com, 2023, para 16).
Reason Client Taking	To prevent and treat venous thrombosis.	To treat vitamin deficiencies.	Constipation	Constipation	To replace lost fluids
Contraindications (2)	"Bleeding or hemorrhagic tendencies such as active ulceration or overt bleeding" (Nurse's Drug Handbook, 2021, p. 1380). "Cerebrovascular hemorrhage" (Nurse's Drug	"Taking similar vitamin products that contain the same substances" (Drugs.com, 2023, para 3). "Hypersensitivity to the multivitamin products" (Drugs.com, 2023, para 3).	"Rectal bleeding" (Drugs.com, 2023, para 15). "Undiagnosed abdominal pain" (Drugs.com, 2023, para 15).	"Intestinal obstruction" (Osmosis from Elsevier, 2023, p. 1). "Severe abdominal pain" (Osmosis from Elsevier, 2023, p. 1).	"If the patient is already showing signs of fluid volume overload" (Drugs.com, 2023, para 14). "Should not be administered with impaired cardiac or

	Handbook, 2021, p. 1380).				renal function" (Drugs.com, 2023, para 14).
Side Effects/Adverse Reactions (2)	"Potentially fatal hemorrhage" (Nurse's Drug Handbook, 2021, p. 1381). "Hypotension" (Nurse's Drug Handbook, 2021, p. 1381).	"Upset stomach" (Drugs.com, 2023, para 20). "Headache" (Drugs.com, 2023, para 20).	"Abdominal cramping" (Osmosis from Elsevier, 2023, p. 2). "Excessive bowel activity" (Osmosis from Elsevier, 2023, p. 2).	"Diarrhea" (Osmosis from Elsevier, 2023, p. 1). "Bloating" (Osmosis from Elsevier, 2023, p. 1).	"Dyspnea" (Drugs.com, 2023, para 24). "Tachycardia" (Drugs.com, 2023, para 24).
Nursing Considerations (2)	"Expect to give another parenteral anticoagulant, such as enoxaparin or heparin, with oral warfarin for at least 3 days, or until desired response occurs, before giving warfarin only" (Nurse's Drug Handbook, 2021, p. 1381). "Avoid I.M.	"Take the multivitamin with a full glass of water" (Drugs.com, 2023, para 11). "Never take more than the recommended dose" (Drugs.com, 2023, para 9).	"Prolonged use of laxatives can cause dependence" (Osmosis from Elsevier, 2023, p. 2). "Increase fiber intact, physical activity, and fluids" (Osmosis from Elsevier, 2023, p. 2).	"Follow each dose by eight ounces of water" (Osmosis from Elsevier, 2023, p. 1). "Increase fiber intact, physical activity, and fluids" (Osmosis from Elsevier, 2023, p. 1).	"Avoid storing in excessive heat" (Drugs.com, 2023, para 14). "B careful in administering the fluids with patients diagnosed with CHF" (Drugs.com, 2023, para 14).

	injections during warfarin therapy, if possible, because they can result in bleeding, bruising, and hematoma" (Nurse's Drug Handbook, 2021, p. 1381).				
Key Nursing Assessment(s)/Lab(s) Prior to Administration	"Monitor INR (daily in acute care setting) and assess for therapeutic effects, as prescribed" (Nurse's Drug Handbook, 2021, p. 1381). "Monitor patient with hepatic impairment closely for bleeding, because hepatic impairment decreases metabolism of warfarin and impairs synthesis of clotting factors" (Nurse's	"Monitor BMP per providers request when taking a multivitamin" (Drugs.com, 2023, para 5). "Monitor CBC per providers request when taking a multivitamin" (Drugs.com, 2023, para 5).	"Withhold drug is diarrhea develops and notify physician" (Osmosis from Elsevier, 2023, p. 2). "Listen to bowel sounds and take vital signs before administration" (Osmosis from Elsevier, 2023, p. 2).	"Withhold drug is diarrhea develops and notify physician" (Osmosis from Elsevier, 2023, p. 1). "Listen to bowel sounds and take vital signs before administration" (Osmosis from Elsevier, 2023, p. 1).	"Monitor renal functions levels such as creatinine and BUN" (Drugs.com, 2023, para 14). "Check for edema before administration of fluids" (Drugs.com, 2023, para 14).

	Drug Handbook, 2021, p. 1382).				
Client Teaching Needs (2)	"Instruct patient to take drug at the same time each evening" (Nurse's Drug Handbook, 2021, p. 1382). "Explain that warfarin therapy aims to prevent thrombosis by decreasing clotting ability while avoiding the risk of spontaneous bleeding" (Nurse's Drug Handbook, 2021, p. 1382).	"Contact provider before administering the multivitamin" (Drugs.com, 2023, para 5). "You must chew the chewable tablet before swallowing it" (Drugs.com, 2023, para 14).	"Take sufficient liquid with each dose and increase fluid intake during the day" (Osmosis from Elsevier, 2023, p. 2). "If constipation is unrelieved see your provider" (Osmosis from Elsevier, 2023, p. 2).	"Take sufficient liquid with each dose and increase fluid intake during the day" (Osmosis from Elsevier, 2023, p. 1). "If constipation is unrelieved see your provider" (Osmosis from Elsevier, 2023, p. 1).	"Patients still need to increase their fluid intake PO as well" (Drugs.com, 2023, para 14). "Notify provider is feeling shortness of breath during infusion" (Drugs.com, 2023, para 14).

Hospital Medications (5 required)

Brand/ Generic	Zofran/ ondansetron	Protonix/ pantoprazole	Hysingla ER/hydrocodone acetaminophen	Tylenol/ acetaminophen	Dilaudid/ hydromorphone
Dose	4 mg	40 mg	5-325 mg (1-2 tabs)	650 mg	1 mg
Frequency	Q6h/PRN	BID	Q6h/PRN	Q6h/PRN	Q4h/PRN
Route	ODT	IV	PO	PO	IV
Classification	Pharmacologic class: "Selective serotonin receptor antagonist" (Nurse's Drug Handbook, 2021, p. 1000-1002). Therapeutic class: "Antiemetic" (Nurse's Drug Handbook, 2021, p. 1000-1002).	Pharmacological class: "Proton pump inhibitor" (Nurse's Drug Handbook, 2021, p. 1038). Therapeutic class: "Antiulcer" (Nurse's Drug Handbook, 2021, p. 1038).	Pharmacologic class: "Opioid" (Nurse's Drug Handbook, 2021, p. 649). Therapeutic class: "Opioid analgesic Controlled substance schedule: II" (Nurse's Drug Handbook, 2021, p. 649).	Pharmacological class: "Nonsalicylate, para-aminophenol derivative" (Nurse's Drug Handbook, 2020, p. 8) Therapeutic class: "Antipyretic, nonopioid analgesic" (Nurse's Drug Handbook, 2020, p. 8).	Pharmacologic class: "Opioid" (Nurse's Drug Handbook, 2021, p. 657). Therapeutic class: "Opioid analgesic Controlled substance schedule: II" (Nurse's Drug Handbook, 2021, p. 657).
Mechanism of Action	"Blocks serotonin receptors centrally in the chemoreceptor trigger zone and peripherally at vagal nerve terminals in the intestine.	"Interferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphosphate (H+ K+ -ATPase) enzyme system or	"Binds to and activates opioid receptors at sites in the periaqueductal and periventricular gray matter, the	"Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous	"May bind with opioid receptors in the spinal cord and higher levels in the CNS. In this way, hydromorphone is believed to stimulate kappa and mu

	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 by blocking signals to the CNS. Ondansetron may also bind to other serotonin receptors and to mu-opioid receptors." (Nurse's Drug Handbook, 2021, p. 1000-1002).	proton pump, in gastric parietal cells. Normally, the proton pump uses energy from hydrolysis of ATPase to drive H+ and chloride (Cl-) out of parietal cells and into the stomach lumen in exchange for potassium (K+), which leaves the stomach lumen and enters parietal cells. After this exchange, H+ and Cl- combine in the stomach to form hydrochloric acid (HCI). 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 and additional HCI from forming" (Nurse's Drug Handbook, 2021, p.	ventromedial medulla, and the spinal cord to produce pain relief." (Nurse's Drug Handbook, 2021, p. 650).	system. Acetaminophen also acts directly on temperature-regulating center in the hypothalamus by inhibiting synthesis of prostaglandin E2" (Nurse's Drug Handbook, 2020, p. 10).	receptors, thus altering the perception of and emotional response to pain" (Nurse's Drug Handbook, 2021, p. 658).

		1039).			
Reason Client Taking	Nausea	To treat GERD (gastroesophageal reflux disease).	Moderate pain	Pain/fever	Severe pain
Contraindications (2)	"Concomitant use of apomorphine." (Nurses Drug Handbook, 2021, p. 1002). "Hypersensitivity to ondansetron or its components." (Nurses Drug Handbook, 2021, p. 1002).	"Hypersensitivity to pantoprazole" (p. 1039). "Concurrent therapy with rilpivirine containing products" (Nurse's Drug Handbook, 2021, p. 1039).	"Known or suspected gastrointestinal obstruction" (Nurse's Drug Handbook, 2021, p. 650). "Hypersensitivity to hydrocodone bitartrate or any of its components" (Nurse's Drug Handbook, 2021, p. 650).	"Hypersensitivity to acetaminophen or its components" (Nurse's Drug Handbook, 202, p. 10). "Severe hepatic impairment" (Nurse's Drug Handbook, 202, p. 10).	"Hypersensitivity to hydromorphone" (Nurse's Drug Handbook, 2021, p. 658). "History of narrowing of the GI tract or presence of blind loops in the GI tract" (Nurse's Drug Handbook, 2021, p. 658).
Side Effects/Adverse Reactions (2)	**"Dizziness"** (Nurse's Drug Handbook, 2021, p. 1002). "Tachycardia" (Nurse's Drug Handbook, 2021, p. 1002).	"Hyperglycemia" (Nurse's Drug Handbook, 2021, p. 1039). "Diarrhea" (Nurse's Drug Handbook, 2021, p. 1039).	"Depression" (Nurse's Drug Handbook, 2021, p. 650). "Constipation (may be severe)" (Nurse's Drug Handbook, 2021, p. 651).	"Hypoglycemic coma" (Nurse's Drug Handbook, 202, p. 10). "Fever" (Nurse's Drug Handbook, 202, p. 10).	"Dizziness" (Nurse's Drug Handbook, 2021, p. 658). "Tachycardia" (Nurse's Drug Handbook, 2021, p. 658).

Nursing Considerations (2)	"Know that if hypokalemia or hypomagnesemia is present, these electrolyte imbalances should be corrected before ondansetron is administered because of increased risk for QT-interval prolongation" (Nurse's Drug Handbook, 2021, p. 1002). "Instruct patient to place ondansetron disintegrating tablet on her tongue immediately after opening package and to let it dissolve on his tongue before swallowing" (Nurse's Drug	"Be aware that if therapy lasts more than 3 years, patient may not be able to absorb vitamin B12" (Nurse's Drug Handbook, 2021, p. 1040). "Monitor the patient, especially the patient on long-term therapy for hypomagnesemia" (Nurse's Drug Handbook, 2021, p. 1040).	"Be aware that drug can cause sleep-related breathing disorders including centra sleep apnea and sleep related hypoxemia that may require dosage decrease, if present" (Nurse's Drug Handbook, 2021, p. 652). "Monitor patient for evidence of physical dependence or abuse" (Nurse's Drug Handbook, 2021, p. 652).	"Calculate total daily intake of acetaminophen including other products so maximum daily dosage is not exceed" (Nurse's Drug Handbook, 202, p. 11). "Use acetaminophen cautiously in patients with hepatic impairment or active hepatic disease, alcoholism, chronic malnutrition, severe hypovolemia, or sever renal impairment" (Nurse's Drug Handbook, 2021, p. 11).	"Use hydromorphone cautiously in patient whose ability to maintain a normal blood pressure" (Nurse's Drug Handbook, 2021, p. 659). "Be aware that drug can cause sleep-related breathing disorders including central sleep apnea and sleep-related hypoxemia that may require a dosage decrease" (Nurse's Drug Handbook, 2021, p. 659).

	Handbook, 2021, p. 1003).				
Key Nursing Assessment(s)/Lab(s) Prior to Administration	"Monitor patient's electrocardiogram as ordered" (Nurse's Drug Handbook, 2021, p. 1003). "Monitor patient closely for confusion, agitation, restlessness, or twitching" (Nurse's Drug Handbook, 2021, p. 1003).	"Expect to monitor PT or INR during theory if patient take an oral anticoagulant" (Nurse's Drug Handbook, 2021, p. 1040). "Monitor patients urine output because it may cause acute tubulointerstitial nephritis" (Nurse's Drug Handbook, 2021, p. 1040).	"Monitor patient for decreased bowel motility" (Nurse's Drug Handbook, 2021, p. 653). "Monitor patients vital signs closely, especially after initiating o titrating dose of hydrocodone" (Nurse's Drug Handbook, 2021, p. 652).	"Monitor renal function in patient on long term therapy" (Nurse's Drug Handbook, 202, p. 11). "Know that before and during long term therapy liver function test results, including AST, ALT, bilirubin, and creatinine levels" (Nurse's Drug Handbook, 2021, p. 11).	"Monitor patient for adrenal insufficiency" (Nurse's Drug Handbook, 2021, p. 660). "Monitor patient for coma, hypotension, profound sedation, or respiratory depression" (Nurse's Drug Handbook, 2021, p. 660).
Client Teaching Needs (2)	"Advise patient to immediately report signs of hypersensitivity, such as a rash" (Nurse's Drug Handbook, 2021, p. 1003).	"Instruct patient to swallow delayed-release tablets whole and not to break, chew, or crush them" (Nurse's Drug Handbook, 2021, p. 1040). "Tell patient	"Urge patient to consume plenty of fluids and high fiber foods to prevent constipation" (Nurse's Drug Handbook, 2021, p. 653).	"Caution patient not to exceed recommended dose or take other drugs containing acetaminophen" (Nurse's Drug Handbook, 202, p. 11). "Teach patient/parent to recognize	"Advise patient to take drug with food to avoid GI distress" (Nurse's Drug Handbook, 2021, p. 660). "Caution patient to avoid alcohol and OTC drugs during therapy, unless

	"Reassure patient with transient blindness that it will resolve within a few minutes to 48 hours" (Nurse's Drug Handbook, 2021, p. 1003).	to take delayed-release oral suspension 30 minutes before a meal mixed in apple juice or applesauce; no other liquid or food should be used" (Nurse's Drug Handbook, 2021, p. 1040).	"Caution patient to avoid hazardous activities until drugs CNS effects are known" (Nurse's Drug Handbook, 2021, p. 653).	signs of hepatotoxicity, such as bleeding, easy bruising and malaise, which commonly occurs with chronic overdose" (Nurse's Drug Handbook, 202, p. 11).	prescriber approves" (Nurse's Drug Handbook, 2021, p. 660).

Medications Reference (1) (APA):

Docusate. DrugBank Online. (2023). Retrieved from https://go.drugbank.com/drugs/DB11089

Jones & Bartlett Learning. (2021). *2021 Nurse's drug handbook* (20th ed.), Jones & Bartlett Learning.

Laxatives: Nursing pharmacology. Osmosis from Elsevier. (2023). Retrieved from https://www.osmosis.org/learn/Laxatives:_Nursing_Pharmacology

Multivitamins. Drugs.com. (2023). Retrieved from https://www.drugs.com/mtm/multivitamins.html

Polyethylene Glycol. DrugBank Online. (2023). Retrieved from https://go.drugbank.com/drugs/DB09287

Sodium chloride. DrugBank Online. (2023). Retrieved from https://go.drugbank.com/drugs/DB09153

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient is alert and oriented to person, place, situation, and time. The patient appears to be in no acute distress and appearance is appropriate for the setting.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Patients' skin color is appropriate for ethnicity. Skin is pink, warm, and dry upon palpation. No rashes are present, bruising, and lesions noted bilaterally. There are no wounds or drains present. Nails are without clubbing or cyanosis. Skin turgor is non-tenting. This patient scored a 23 on the Braden scale which indicates this patient is a low risk for a pressure ulcer. Capillary refill is less than 3 seconds bilaterally on fingers and toes.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head and neck are symmetrical, trachea is midline without deviation, thyroid is not palpable, no nodules noted. Bilateral carotid pulses are palpable and 2+. There is no lymphadenopathy noted in the head or neck. Sclera bilaterally white, cornea bilaterally clear, bilaterally conjunctiva clear. There is no visible drainage from the eyes. Lids are moist and pink without lesions bilaterally. PERRLA is intact bilaterally. EOMs are intact bilaterally. Auricles have no palpable lumps or lesions bilaterally. Septum is midline, frontal sinuses are nontender to palpation bilaterally. Nasal condition is patent without discharge. Tonsils are moist and pink without exudate +1. Uvula is midline; soft palate rises and falls symmetrically. Hard palate intact. Patients' oral mucosa overall is moist and pink without lesions noted. Airway was patent with no signs of change in clinical course.
CARDIOVASCULAR:	Clear S1 and S2 without murmurs, gallops, or rubs.

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:**	PMI palpable at 5th intercostal space at midclavicular line. Normal rate and rhythm. Peripheral pulses are 3+ bilaterally. Radial pulses 2+ bilaterally. Capillary refill is less than 3 seconds bilaterally on toes and fingers. There is no neck vein distention or edema noted.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	The patient had a clear and regular respiratory pattern. Respirations were non-labored, lungs are clear anterior/posterior bilaterally, no wheeze, crackles, or rhonchi noted. Lung aeration is equal bilaterally. There is no ET tube noted.
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 is regular. Diet at the hospital is a clear liquid diet and the patient is tolerating well. Patient weighs 63.64 kg and height of 66 inches. Bowel sounds are hyperactive in all four quadrants. Abdomen is soft, nontender, no organomegaly or masses noted upon palpation. Last bowel movement was on 4-3-23. The patient noted there was blood in her stool and came straight to the ED. There is no distention, incisions, scars, drains, or wounds noted. There is no ostomy, nasogastric, or feeding tube noted.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	The patient's urine is yellow and clear. Patient intake was 620 mL with water, coffee, juice, and chicken broth. The patient voided 500 mL within 4 hours. The patient stated there is no pain with urination. The patient does not have a foley catheter.
MUSCULOSKELETAL:	Upper and lower extremities have a full active

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☐**	range of motion. Patient has a steady gait. Strength is +5 in upper and lower extremities. Capillary refill is less than 3 seconds bilaterally. Extremities are pink, warm, and dry bilaterally. There is no cyanosis or clubbing noted bilaterally. This patient scored a 35 on fall risk which indicates she is a low risk for falls. Patient is independent. Patient does not need assistance with equipment or support to stand and walk.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient is oriented to person, place, situation, and time. The patient has normal cognition. Speech is clear. Patient is awake and answers questions appropriately. The patient moves the upper and lower extremities well. PERRLA is intact. Hands grips and pedal pushes and pulls demonstrated normal and equal strength for upper and lower extremities. Cranial nerves intact. Sensory is intact. Patient denies numbness or tingling bilaterally in upper and lower extremities.
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):**	There were no coping methods or religion noted. The patient lives at home with her husband. The patient has a bachelor's degree in early childhood education.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700	76 bpm	120/68 mmHg	16 breaths per minute	37.0 C	98% Room air
1100	69 bmp	124/63 mmHg	18 breaths per minute	36.9 C	97% Room air

Vital Sign Trends: The patient's vital signs are all within normal range within the 2 assessments.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0700	Numeric Scale	Generalized abdominal pain	4/10	N/A	Tylenol was administered at this time.
1100	Numeric Scale	Generalized abdominal pain	1/10	N/A	No intervention at this time.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 18 gauge **Location of IV:** left antecubital. **Date on IV: 3-17-20** **Patency of IV:** The IV site is patent. **Signs of erythema, drainage, etc.:** There are no signs of phlebitis, infiltration, erythema, or drainage noted. **IV dressing assessment:** The dressing in clean, dry, and intact.	The patient has D5NS at 75 mL/hr.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Water 300 mL with breakfast Coffee/Juice 120 mL with breakfast Chicken broth 200 mL with breakfast	Urine 500 mL total voided in 4 hours Stool x1, small amount of blood noted.

Nursing Care

Summary of Care (2 points)

Overview of care: Patient was admitted due to having blood in her stool and feeling dizzy. A full body assessment, labs, occult blood stool, and imaging to discover the result of gastrointestinal bleeding.

Procedures/testing done: The patient had an EKG and chest x-ray done.

Complaints/Issues: The patient had no complaints or issues while I was on the unit.

Vital signs (stable/unstable): The patients vital signs were stable and all within normal range.

Tolerating diet, activity, etc.: The patient is on a clear liquid diet. The provider will consider advancing when the patient is free from bleeding for 24 hours.

Physician notifications: The physician noted to do serial CBC's q8h to monitor for a decrease in hemoglobin and hematocrit. If the hemoglobin drops below 8, call the provider immediately for blood transfusion orders. The physician wants warfarin to be on hold. The physician will re-address when bleeding has stopped.

Future plans for client: The patient will remain on off-site telemetry due to history of atrial fibrillation. There is no current date for discharge. As of now, the patient will remain on a clear liquid diet until being 24 hours free from bleeding then reassessed.

Discharge Planning (2 points)

Discharge location: The patient does not have a discharge date assigned. When discharged the patient will be returning home with her husband.

Home health needs (if applicable): The patient will remain on off-site telemetry due to atrial fibrillation.

Equipment needs (if applicable): There is no equipment needed due to the patient having the equipment.

Follow up plan: There is no follow up plan as of right now.

Education needs: The patient will receive education on preventing future events. The patient will also need education on maintaining her atrial fibrillation and hyperglycemic states.

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 for bleeding related to decreased clotting factors secondary to warfarin as evidenced by occult blood stool results positive.	The patient is actively bleeding in her GI tract. The patient needs immediate care as a result of not knowing how fast the patient is bleeding.	1. "Monitor for occult bleeding in feces through assessment" (Phelps, 2020, p. 56). 2. "Manage and monitor the recovery progress" (Phelps, 2020, p. 57).	1. The interdisciplinary team will identify the source of bleeding and stop the bleeding within 24 hours of being admitted.	The patient responded well to the goals and verbally acknowledged the status of the goals and outcomes.
2. Decrease cardiac output related to	The patient has a history of atrial fibrillation	**1.** "Monitor at least every 4 hours and	1. The patient will learn how to manage her atrial	The patient responded well to the goals and verbally

atrial fibrillation as evidenced by EKG.	resulting in decreased cardiac output.	report immediately any irregularities in heart rate, rhythm, and blood pressure" (Phelps, 2020, p. 82). **2.**"Monitor at least every 4 hours for dyspnea, fatigue, or jugular distention" (Phelps, 2020, p. 82).	fibrillation to increase her cardiac output within 3 months of discharge.	acknowledged the status of the goals and outcomes.
3. Risk for unstable blood glucose level related to insufficient knowledge of modifiable factors as evidence by blood glucose reading of 147 mg/dL.	Labs were taken when arriving at the ED. The glucose reading showed the patient was in hyperglycemic state which is concerning due to the family history of diabetes.	**1.** "Assess for the underlying cause of changes in glucose" (Phelps, 2020, p. 61). **2.** "Assess patients' knowledge of hyperglycemia to ensure adequate management and prevent future episodes" (Phelps, 2020, p. 61).	1. The patient will understand how to manage her glucose by the end of her hospital stay.	The patient responded well to the goals and verbally acknowledged the status of the goals and outcomes.
4. Imbalanced	The patient is	**1.** "Obtain and	1. The patient	The patient

nutrition is related to inability to ingest food due to a clear liquid diet as evidenced by gastrointestinal bleed.	not receiving the nutrients she needs due to the patient being put on a clear liquid diet.	record patients weight at the same time every day to get accurate readings" (Phelps, 2020, p. 404). **2.** "Monitor fluid intake and output because body weight may decrease as a result of fluid loss" (Phelps, 2020, p. 404).	will be free from bleeding in 24 hours so the patient can increase her diet to get her nutrients.	responded well to the goals and verbally acknowledged the status of the goals and outcomes.

Other References (APA):

Phelps, L.L. (2020). *Sparks and Taylor's nursing diagnosis reference manual* (11th ed.), p. 56, 57, 61, 82, & 404. Wolters Kluwer.

Concept Map (20 Points):

Subjective Data

When being admitted to the ED the patient expressed “after standing up from her bowel movement she became dizzy and noted there was blood in her stool.” I was unable to receive further information due to not being present in clinical.

Nursing Diagnosis/Outcomes

1. Risk for bleeding related to decreased clotting factors secondary to warfarin as evidenced by occult blood stool results positive.
    a. The interdisciplinary team will identify the source of bleeding and stop the bleeding within 24 hours of being admitted.
2. Decrease cardiac output related to atrial fibrillation as evidenced by EKG.
    a. The patient will learn how to manage her atrial fibrillation to increase her cardiac output within 3 months of discharge.
3. Risk for unstable blood glucose level related to insufficient knowledge of modifiable factors as evidence by blood glucose reading of 147 mg/dL.
    a. The patient will understand how to manage her glucose by the end of her hospital stay.
4. Imbalanced nutrition is related to inability to ingest food due to a clear liquid diet as evidenced by gastrointestinal bleed.
    a. The patient will be free from bleeding in 24 hours so the patient can increase her diet to get her nutrients.

Objective Data

The patient physical examination came back within normal limits besides the blood in her stool prior to being admitted and in the ED. Labs showed decreased hemoglobin, hematocrit, and platelets. While, glucose, PT, PTT, and INR were increased. The patient is on continuous off-site telemetry. While being admitted the patient has an EKG and chest x-ray done. The EKG show sinus tachycardia while chest x-ray shows negative for any acute abnormalities. All vital signs are within normal limits. The patient was given vitamin K and PRBS’s in the ED due to CBC and coagulation studies.

Client Information

60-year-old female with a history of atrial fibrillation. Patient came into the ED with husband from personal vehicle. The patient had found blood in her stool, while standing up she became dizzy. The patient is compliant.

Nursing Interventions

1. “Monitor for occult bleeding in feces through assessment” (Phelps, 2020, p. 56).
2. “Manage and monitor the recovery progress” (Phelps, 2020, p. 57).
1. “Monitor at least every 4 hours and report immediately any irregularities in heart rate, rhythm, and blood pressure” (Phelps, 2020, p. 82).
2. “Monitor at least every 4 hours for dyspnea, fatigue, or jugular distention” (Phelps, 2020, p. 82).
1. “Assess for the underlying cause of changes in glucose” (Phelps, 2020, p. 61).
2. “Assess patients’ knowledge of hyperglycemia to ensure adequate management and prevent future episodes” (Phelps, 2020, p. 61).
1. “Obtain and record patients weight at the same time every day to get accurate readings” (Phelps, 2020, p. 404).
2. “Monitor fluid intake and output because body weight may decrease as a result of fluid loss” (Phelps, 2020, p. 404).