N441 Care Plan

Lakeview College of Nursing

Shanique Williams

Demographics (3 points)

Date of Admission 1-14-2024	**Client Initials** H.K	**Age** 71	**Gender** Male
Race/Ethnicity Non-Hispanic	**Occupation** Owner of Kuhn Equipment Co.	**Marital Status** Married	**Allergies** No known
Code Status Full code	**Height** 5’11	**Weight** 238 lbs.	

Medical History (5 Points)

Past Medical History: Atrial fibrillation, coronary artery disease, hypertension, congestive heart failure, covid-19

Past Surgical History: Exploratory laparotomy

Family History: No family history on file

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

The patient stated he has never smoked. The patient stated he has never used smokeless tobacco. The patient stated he does not currently drink alcohol. The patient stated he has never used drugs.

Assistive Devices: The patient does not use any assistive devices.

Living Situation: The patient currently lives in the home with his wife.

Education Level: The patient has a college background.

Admission Assessment

Chief Complaint (2 points): The patient experienced a fall.

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

H.K., a 71-year-old Caucasian male with a noteworthy medical history of atrial fibrillation, hypertension, congestive heart failure, and coronary heart disease, arrived at Sarah Bush Lincoln

Health Center on January 13, 2024, due to a fall and increased lethargy. While the patient is sedated and intubated, the history of the current illness is reviewed in the chart. While trying to walk to the restroom yesterday morning, the patient fell. About nine days ago, the patient tested positive for covid. The family reported poor appetite and oral intake for the past few days. He complained of stomach pain, had systolic blood pressure in the 80s, and was hypotensive when the ambulance arrived. A CT scan of his belly revealed an intra-abdominal hematoma and a CT scan of his brain revealed scattered subarachnoid and intraventricular hemorrhage. After testing, the patient went to the operating room for an exploratory laparotomy. The patient was moved to Carle Foundation Hospital for additional care after stabilizing.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Fall

Secondary Diagnosis (if applicable): Trauma (subarachnoid hemorrhage), (intraventricular hemorrhage), (abdominal hemorrhage), (supratherapeutic INR).

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

Falls are among the most frequent adverse events that occur in hospitalized patients. Injuries from falls can lengthen a patient's hospital stay, raise the possibility of complications, and increase death, especially in the case of elderly patients (Mayo Clinic, 2022). Excessive lethargy caused the patient to fall, which resulted in injuries. Lifestyle and home modification can help prevent fractures, keep everyone safe, and keep hospital stays minimal. There are two types of fall hazards: environmental and patient specific (Mayo Clinic, 2022). Fall prevention is an important topic to consider as the patient ages. Health issues, physical changes, and medications used to treat those conditions can contribute to falls (Mayo Clinic, 2022).

Diagnostic testing conducted on the patient following the trauma revealed that he had suffered an intraventricular hemorrhage, a subarachnoid hemorrhage, and an abdominal hemorrhage; these injuries indicated that the patient had hemorrhaged inside or around the ventricles, in the abdomen, and a space in the brain (Johns Hopkins, 2019). Due to the patient's severe fall, the patient was intubated when he arrived at the hospital and is currently being monitored in the intensive care unit. His lab values are all over the place; he had COVID-19, which, at his age and his primary medical history, could be a contributing factor to why he was feeling so tired and fell. Significant falls can seriously harm a person's body. Risk factors are the several circumstances found via research to increase the likelihood of falling (Mayo Clinic, 2022). It is possible to alter or modify several risk variables to minimize falls. A few risk factors include low vitamin D levels (the patient's calcium level was 7.5 mg/dL upon arrival), medication use, visual problems, potential risks at home (such as uneven or broken steps, rugs, or debris), and weakness in the lower body (Mayo Clinic, 2022). A person's odds of falling increase with the number of risk factors they have, as most falls are the result of a combination of risk factors. Many fall prevention techniques are available to help patients avoid falling; the patient is overweight and, according to his family, does not take good care of his health. To assist in keeping the body strong, the patient can engage in active range of motion exercises, remove clutter and throw rugs, and obtain assistive devices (Mayo Clinic, 2022). For the physician to assess the patient's risk of falling again, the patient and provider can also communicate. The patient can communicate with the pharmacy and the doctor to review the medicine to see if it makes him dizzy or sleepy (Mayo Clinic, 2022). The patient should get his eyes checked to ensure his eyesight is not contributing to his fall, place a railing in the shower to get in and out

and ensure the home is well-lit so the patient can see where he is going. The patient should continue to follow up with the provider and follow treatment plans that are beneficial to helping the patient stay healthy and prevent falls in the future.

Pathophysiology References (2) (APA):

Mayo Clinic. (2022, February 3). *Fall prevention: Simple tips to prevent falls*. Mayo Clinic. https://www.mayoclinic.org/healthy-lifestyle/healthy-aging/in-depth/fall-prevention/art-20047358

Johns Hopkins Medicine. (2019, November 19). *Subarachnoid hemorrhage*. Johns Hopkins Medicine. https://www.hopkinsmedicine.org/health/conditions-and-diseases/subarachnoid-hemorrhage#:~:text=A%20subarachnoid%20hemorrhage%20means%20that,the%20brain%20bursts%20and%20leaks.

Johns Hopkins Medicine. (2020, July 20). *Intraventricular hemorrhage*. https://www.hopkinsmedicine.org/health/conditions-and-diseases/intraventricular-hemorrhage

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	4.40 – 5.80 mcl	3.86	3.33	Low RBC's can be an indication of an infection going on. The patients CT scan also showed an intraventricular hemorrhage, and a hemorrhage can be a sign of low RBC's (Pagana, 2019).
Hgb	13.0 – 16.5 g/dL	11.4	9.8	The patients have a secondary diagnosis that shows abdominal hemorrhage and scattered subarachnoid hemorrhage which can mean there is a bleed in a space that surrounds the brain. This can be the reason for the low Hgb levels. It can also mean the body is not getting enough oxygen (Pagana, 2019).
Hct	38.0 – 50.0 %	32.0	28.4	The patients diagnostic test showed scattered subarachnoid hemorrhage which can mean there is a bleed in a space that surrounds the brain this can be the reason for the low Hct levels (Pagana, 2019).
Platelets	140 – 440 mcl	224	286	
WBC	4.00 – 12.00 mcl	19.30	18.63	Elevated WBC levels can mean there may be an infection or inflammation (Pagana, 2019).
Neutrophils	1.40 – 5.30 mcl	15.94	15.71	High neutrophils can mean that the body is under stress. It can possibly be an infection or inflammation in the body (Pagana, 2019).
Lymphocytes	19.0 – 49.0 %	0.50	1.06	Low lymphocytes can be an indication of an infection or inflammation of the body. The patient has endured trauma, which causes stress on the body. The patient also experienced covid-19 (Pagana, 2019).
Monocytes	3.0 – 13.0 %	1.51	1.52	Elevated monocytes can mean that the body is under stress. It can possibly be an infection or inflammation in the body. The patient did experience covid-19 which could be a reason for elevated monocytes (Pagana, 2019).

Eosinophils	0.0 – 8.0 %	0.02	0.11	Elevated eosinophils can mean the body is under stress. It can possible be an infection or inflammation in the body (Pagana, 2019).
Bands	0 - 5	0.9	N/A	

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136 – 145 mmol/L	138	143	
K+	3.5 – 5.1 mmol/L	3.1	2.8	Low potassium levels could mean there is excessive potassium loss in the urine. The patient does have a secondary diagnosis of heart disease and hypertension and that requires him to take medication that could potentially be the reason for increase urination resulting in the loss of potassium (Pagana, 2019).
Cl-	98 – 107 mmol/L	111	111	An elevated Chloride level can be due to dehydration, kidney issues, or metabolic acidosis. This can mean there is too much acid in the blood (Pagana, 2019).
CO2	22 – 30 mmol/L	22.0	22.0	
Glucose	74 – 100 mg/dL	119	99	A high glucose level can happen when the body has too little insulin or the body cannot use insulin properly (Pagana, 2019).
BUN	8 -26 mg/dL	23	24	
Creatinine	0.70 – 1.30 mg/dL	1.43	N/A	
Albumin	3.5 – 5.0 g/dL	2.1	N/A	The patient has a past medical history of heart failure, and this can be a reason for low albumin levels. This condition becomes more prevalent with increasing age and illness (Pagana, 2019).
Calcium	8.9 – 10.6	7.5	8.3	Due to the patient's poor diet, low

	mg/dL			calcium levels may indicate insufficient vitamin D intake. Fatigue and muscle aches are two signs of calcium insufficiency that can result from low blood calcium levels. The patient said that just before he fell, he was pretty tired (Pagana, 2019).
Mag	1.6 – 2.6 md/dL	1.9	1.7	
Phosphate	3.0 – 4.5 mg/dL	2.4	N/A	
Bilirubin	0.2 – 1.2 mg/dL	1.4	N/A	High bilirubin can possibly mean that something is not working as expected in the liver or gallbladder (Pagana, 2019).
Alk Phos	40 – 150 u/L	53	N/A	
AST	5 – 34 u/L	26	N/A	
ALT	0 – 55 u/L	35	N/A	
Amylase	60 – 120 u/L	N/A	N/A	
Lipase	8 – 78 u/L	N/A	N/A	
Lactic Acid	0.50 – 2.20 mmol/L	N/A	N/A	
Troponin	0.00 – 0.03 ng/L	106	N/A	The patient has a past medical history of atrial fibrillation and congestive heart failure which could be indicators for the elevated troponin levels (Pagana, 2019).
CK-MB	0.5 – 3.6 ng/mL	N/A	N/A	
Total CK	30 – 200 u/L	N/A	N/A	

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

Lab Test	Normal Range	Value on Admissio	Today's Value	Reason for Abnormal

		n		
INR	0.8 – 1.1	1.2	N/A	An elevated INR level could possibly mean the blood is clotting slower than normal. When INR is elevated, the patient has an increased risk of bleeding (Pagana, 2019).
PT	10.1 – 13.1 sec	14.7	N/A	An elevated PT level could possibly mean the blood is clotting slower than normal. When PT is elevated, the patient has an increased risk of bleeding (Pagana, 2019).
PTT	25 – 36 sec	27.3	N/A	
D-Dimer	0 – 622 ng/mL	N/A	N/A	
BNP	0 – 100 pg/mL	N/A	N/A	
HDL	60	N/A	N/A	
LDL	< 130	N/A	N/A	
Cholesterol	< 200	N/A	N/A	
Triglycerides	40 – 180 mmpl/L	N/A	N/A	
Hgb A1c	4.0 – 6.0 %	N/A	N/A	
TSH	0.300 – 5.000 mlu/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
Color & Clarity	Yellow & Clear	**Yellow**	**N/A**	
pH	5.0 – 9.0	5.0	N/A	
Specific Gravity	1.003 – 1.030	1.045	N/A	An elevated specific gravity could mean that the patient is dehydrated. This means that the concentration of urine is too high (Pagana, 2019).
Glucose	Negative	Negative	N/A	

Protein	Negative mg/dL	Trace	N/A	Protein in the urine could be an indicator of something going on with the kidneys or something as simple as dehydration (Pagana, 2019).
Ketones	Negative mg/dL	Negative	N/A	
WBC	Negative 0 – 5/hpf	54	N/A	Elevated WBC levels could mean there is some sort of infection or inflammation in the urinary tract (Pagana, 2019).
RBC	Negative 0 – 2/ hpf	12	N/A	
Leukoesterase	Negative	Trace	N/A	Leukoesterase is detected in the patient's urine possibly due to the patient having an infection in the urinary tract (Pagana, 2019).

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	7.449	N/A	
PaO2	80 – 100 mm Hg	95	N/A	
PaCO2	35 – 45 mm Hg	35	N/A	
HCO3	22 – 26 mEq/L	24	N/A	
SaO2	95%–100%	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 < 10,000 Positive > 100,000	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Normal upper respiratory tract	N/A	N/A	
Stool Culture	Normal intestinal flora	N/A	N/A	

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). *Mosby's Diagnostic and Laboratory Test Reference*. Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): No other diagnostic test was done.

Diagnostic Test Correlation (5 points):

CT Brain without contrast due to patient experiencing a fall. The CT brain scan can be performed to assess the brain for tumors and other lesions, injuries, intracranial bleeding, structural anomalies, infection, brain function and several other conditions (Johns Hopkins Medicine, 2019). Findings: small-volume, scattered supratentorial subarachnoid hemorrhage; intraventricular extension. The wedge-shaped hypodensity concentrated in the left posterior fossa

may indicate progressive ischemia or contusion, which are consequences of long-term microvascular disease. The maximal transverse diameter of the third ventricle is 10 mm. There were no other significant abnormalities found. A subarachnoid hemorrhage is defined as bleeding in the space between the brain and the tissue covering the brain (Johns Hopkins Medicine, 2019). The patient's acute symptoms and lab results could be explained by the trauma they sustained in a catastrophic fall.

XR chest AP or PA only because the patient had a severe fall. An x-ray of the chest can reveal the presence of pneumonia, heart issues, collapsed lungs, fractured ribs, emphysema, cancer, and several other conditions (Johns Hopkins Medicine, 2019). Impression: Depending on the patient's posture, retraction of the endotracheal tube may be considered; the tube stops around 25 mm above the carina. The tip of an enteric tube superimposes the anticipated position of the stomach body. The side port superimposes the predicted region of the stomach heart; advancement needs to be considered. The thoracic spine and shoulders exhibit degenerative alterations, including notable cardiomegaly with prominence, atherosclerosis, and aortic tortuosity. The left cardio phrenic angle is partially obscured with subtle left lateral basilar opacities.

Diagnostic Test Reference (1) (APA):

Jonhs Hopkins Medicine. (2019, November 19). *Subarachnoid hemorrhage*. Johns Hopkins Medicine. https://www.hopkinsmedicine.org/health/conditions-and-diseases/subarachnoid-hemorrhage#:~:text=A%20subarachnoid%20hemorrhage%20means%20that,the%20brain%20bursts%20and%20leaks.

Johns Hopkins Medicine. (2019, August 14). *Chest X-ray*. https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/chest-xray#:~:text=What%20is%20a%20chest%20X,lungs%20and%20heart%20are%20working.

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

Home Medications (5 required)

Brand/Generic	Aspirin (Acetylsalicylic acid)	Ketorolac (Toradol)	Doxycycline hyclate (Vibramycin)	Ondansetron (Zofran)	Metoprolol succinate (Toprol XL)	
Dose	81 mg tablet	10 mg tablet	100 mg tablet	4 mg tablet	50 mg tablet	
Frequency	Daily	PRN	Daily	PRN	Daily	
Route	Oral	Oral	Oral	Oral	Oral	
Classification	Salicylate. NSAID (Jones & Bartlett Learning, 2021).	NSAID. Analgesic (Jones & Bartlett, 2021)	Tetracycline. Antibiotic (Jones & Bartlett, 2021)	Selective serotonin (5-HT3) (Jones & Bartlett, 2021) receptor antagonist. Antiemetic (Jones & Bartlett Learning, 2021)	Beta1-adrenergic blocker. Antianginal, antihypertensive (Jones & Bartlett, 2021)	

Mechanism of Action	Blocks the activity of cyclooxygenase, the enzyme needed for prostaglandin synthesis. Prostaglandins, important mediators in the inflammatory response, cause local vasodilation with swelling and pain. With blocking of cyclooxygenase and inhibition of prostaglandins. Inflammatory symptoms subside. Pain is also relieved because prostaglandins play a role in pain transmission from the periphery to the spinal cord. Aspirin inhibits platelet aggregation by interfering with production of thromboxane A2, a substance that stimulates platelet aggregation. Aspirin acts on the heat-regulating	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 (Jones & Bartlett, 2021)	Exerts a bacteriostatic effect against a wide variety of gram-positive and gram-negative organisms. Doxycycline is more lipophilic than other tetracyclines, which allows it to pass more easily through the bacterial lipid bilayer, where it binds reversibly to 30S ribosomal subunits. Bounds doxycycline blocks the binding of aminoacyl transfer RNA to messenger RNA, thus inhibiting bacterial protein synthesis (Jones & Bartlett, 2021)	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 (probable cause of chemotherapy- and radiation-induced nausea and vomiting) and blocking signals to the CNS. Ondansetron agonist may also bind to other serotonin receptors and to mu-opioid receptors. (Jones &	Inhibits stimulation of beta1-receptor sites, located mainly in the heart, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand. These effects help relieve angina, minimize cardiac tissue damage from a myocardial infarction, and help relieve symptoms of heart failure. Metoprolol also helps reduce blood pressure by decreasing renal release of renin (Jones & Bartlett, 2021)	

	center in the hypothalamus and causes peripheral vasodilation, diaphoresis, and heat loss (Jones & Bartlett Learning, 2021).			Bartlett Learning, 2021)		
Reason Client Taking	To relieve mild pain	To treat moderate to severe pain	To treat infections	Nausea	To manage hypertension	
Contraindications (2)	Active bleeding or coagulation disorders; breastfeeding (continuous high dose); fever, chickenpox or flu-like symptoms in children and teens; current or recent GI bleed or ulcers; hypersensitivity to aspirin, aspirin products, other NSAIDs; tartrazine dye, or their components; third trimester of pregnancy (Jones & Bartlett Learning, 2021).	Active peptic ulcer disease or recent GI bleeding or perforation; advanced renal impairment or risk of renal impairment due to volume depletion; cerebrovascular bleeding, hemorrhagic diathesis, incomplete hemostasis, or high risk of bleeding; history of asthma, urticaria, or other allegic-type reactions after taking aspirin or other NSAIDs; hypersensitivity to ketorolac tromethamine or its components; labor and delivery;	Hypersensitivity to doxycycline, other tetracyclines, or their components (Jones & Bartlett, 2021)	Concomitant use of apomorphine. Concomitant use of tramadol (Jones & Bartlett Learning, 2021)	For all indications: Hypersensitivity to metoprolol other beta blockers, or their component; for angina and hypertension: Cardiogenic shock, heart block greater than first degree, overt cardiac failure, sinus bradycardia (Jones & Bartlett, 2021)	

		postoperative pain after coronary artery bypass graft (CABG) surgery; use as a prophylactic analgesic before any major surgery (Jones & Bartlett, 2021)				
Side Effects/Adverse Reactions (2)	Gi bleeding, prolong bleeding time (Jones & Bartlett Learning, 2021).	Seizures, laryngeal edema (Jones & Bartlett, 2021)	Headache, pericarditis (Jones & Bartlett, 2021)	Stridor, bronchospasm (Jones & Bartlett Learning, 2021)	Anxiety, heart failure (Jones & Bartlett, 2021)	
Nursing Considerations (2)	Be aware that elderly patients and dehydrated febrile children are at higher risk for toxicity. Expect aspirin therapy to be temporary halted 5 to 7 days before elective surgery to reduce risk of bleeding (Jones & Bartlett Learning, 2021).	Know the risk of heart failure increases with ketorolac use because drug is a NSAID. This class of drugs should not be used in patients with severe heart failure but if unavoidable, monitor patient for worsening of heart failure. Notify prescriber if pain relief is inadequate or if breakthrough pain occurs between doses because supplemental doses of an opioid analgesic may be required (Jones &	Monitor liver function test results as appropriate to detect hepatotoxicity. Monitor patient for adverse skin reactions because doxycycline has caused severe skin reactions that could be life-threatening. Notify prescriber as soon as possible if skin adverse reaction occur, provide	Monitor patient closely for serotonin syndrome, which may include agitation, chills, confusion, diaphoresis, diarrhea, fever, hyperactive reflexes, poor coordination, restlessness, shaking, talking, or acting with uncontrolled excitement, tremor, and twitching. Be aware	Expect patients with acute myocardial infarction who can't tolerate initial dosage or who delay treatment to start with maintenance dosage, as prescribed and tolerated. If patient with heart failure develops symptomatic bradycardia, expect to decrease the metoprolol dosage	

		Bartlett, 2021)	supportive care, as ordered, and expect drug to be discontinued (Jones & Bartlett, 2021)	that oral disintegrating tablets may contain aspartame, which is metabolized to phenylalanine and must be avoided in patients with phenylketonuria. (Jones & Bartlett Learning, 2021)	(Jones & Bartlett, 2021)	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Review the patients' health history, including any previous gastrointestinal bleeding or ulceration, liver or kidney disease, or bleeding disorders (Jones & Bartlett Learning, 2021).	Monitor renal function before administering this medication. Monitor patients with a history of peripheral edema, heart failure, or hypertension for adequate fluid retention and worsen these conditions (Jones & Bartlett, 2021)	Monitor signs of leukopenia (fever, sore throat, signs of infection), monitor baseline vitals (Jones & Bartlett, 2021)	Assess dizziness and drowsiness that might affect gait, balance, and other functional activities prior to administration. (Jones & Bartlett Learning, 2021)	Monitor baseline vitals (Jones & Bartlett, 2021)	
Client Teaching needs (2)	Avoid alcohol while taking aspirin to decrease the risk of ulcers. Advice patient with tartrazine allergy not to take aspirin (Jones &	Caution patient not to use ketorolac for more than five days, as serious adverse effects may occur. Instruct patient to immediately report blood in	Inform patient that the urine may become dark yellow or brown during therapy. Advise	Reassure patient with transient blindness that it will resolve within a few minutes to 48 hours. Advise	Instruct patient to take metoprolol with or immediately after the same meal every day. Explain that	

	Bartlett Learning, 2021).	urine, easy bruising, itching, rash, swelling, or yellow eyes or skin (Jones & Bartlett, 2021)	patient to avoid antacids containing aluminum, calcium, or magnesium (Jones & Bartlett, 2021)	patient to seek immediate medical attention if patient experiences persistent, severe, unusual, or worsening symptoms (Jones & Bartlett, 2021)	the patient may halve tablets but not chew or crush them. Advise patient to notify prescriber if pulse rate falls below 60 beats/minute or is significantly lower than usual (Jones & Bartlett, 2021)	

Hospital Medications (5 required)

Brand/Generic	Atorvastatin (Lipitor)	Digoxin (Lanoxin)	Famotidine (Pepcid)	Fentanyl	Hydralazine (Apresoline)	
Dose	40 mg	0.125 mg	20 mg	25 mcg	10 mg	
Frequency	Daily	Daily	Every 24 hours	Every 3 hours PRN	Every 3 hours PRN	
Route	Gastric tube	Gastric tube	Injection	Injection	injection	
Classification	HMG-CoA reductase inhibitor, antihyperlipidemic (Jones & Bartlett	Cardiac glycoside, antiarrhythmic (Jones & Bartlett, 2021)	Histamine-2-blocker, antiulcer agent (Jones & Bartlett, 2021)	Opioid, opioid analgesic (Jones & Bartlett, 2021)	Vasodilator, antihypertensive (Jones & Bartlett, 2021)	

	Learning, 2021).					
Mechanism of Action	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown (Jones & Bartlett Learning, 2021).	Increases the force and velocity of myocardial contraction, resulting in positive inotropic effects. Digoxin produces antiarrhythmic effects by decreasing the conduction rate and increasing the effective refractory period of the AV node (Jones & Bartlett, 2021)	In normal digestion, parietal cells in the gastric epithelium secrete hydrogen (H+) ions, which combine with chloride ions (Cl-) to form hydrochloric acid (HCl), as shown below left. However, HCl can inflame, ulcerate, and perforate gastric and intestinal mucosa normally protected by mucus (Jones & Bartlett, 2021)	Binds to opioid receptor sites in the CNS, altering perception of and emotional response to pain by inhibiting ascending pain pathways. Fentanyl may alter neurotransmitter release from afferent nerves responsive to painful stimuli, and it causes respiratory depression by acting directly on respiratory centers in the brain stem (Jones & Bartlett, 2021)	May act in a manner that resembles organic nitrates and sodium nitroprusside, except that hydralazine is selective for arteries (Jones & Bartlett, 2021)	
Reason Client Taking	To lower cholesterol and triglyceride levels in the blood	To treat mild to moderate heart failure with rapid digitalization	To provide short-term treatment of active duodenal ulcer	Severe pain	To manage hypertension	

Contraindications (2)	Active hepatic disease, breastfeeding, hypersensitivity to atorvastatin or its components, pregnancy, unexplained persistent rise in serum transaminase level (Jones & Bartlett Learning, 2021).	Hypersensitivity to digoxin or its components, presence or digitalis toxicity, ventricular fibrillation, ventricular tachycardia unless heart failure occurs unrelated to digoxin therapy (Jones & Bartlett, 2021)	Hypersensitivity to famotidine, other H2-receptor antagonists, or their components (Jones & Bartlett, 2021)	Hypersensitivity to fentanyl, alfentanil, sufentanil or their components; intermitted pain; opioid nontolerance (Jones & Bartlett, 2021)	Coronary artery disease, hypersensitivity to hydralazine or its components, mitral valvular rheumatic heart disease (Jones & Bartlett, 2021)	
Side Effects/Adverse Reactions (2)	Arrhythmias, hypoglycemia (Jones & Bartlett Learning, 2021).	Headache, heart block (Jones & Bartlett, 2021)	Seizures, AV block (Jones & Bartlett, 2021)	Hypotension, respiratory depression (Jones & Bartlett, 2021)	Tachycardia, dyspnea (Jones & Bartlett, 2021)	
Nursing Considerations (2)	Know that atorvastatin is used in patients with homozygous familial hypercholesterolemia as an adjunct to other lipid-lowering treatments or alone only if other treatments aren't available. Be aware that atorvastatin may be used	Expect to treat underlying thiamine deficiency in patients with beri-beri heart disease because if left untreated, digoxin therapy may be ineffective. Monitor patients serum potassium level regularly because hypokalemia predisposes to digitalis	Know that adult patients who have a suboptimal response or an early symptomatic relapse after completing famotidine therapy, should be evaluated for gastric malignancy.	Use caution when titrating fentanyl dosage with older adults, cachectic, and debilitated patients, especially when using I.V. route because these patients are more sensitive to drug's effects. Know that to	Check blood pressure with patient in lying, sitting, and standing positions, and watch for signs of orthostatic hypotension. Monitor ANA titer. Expect prescriber to withdraw hydralazine gradually to avoid a rapid increase in blood	

	with colestipol or cholestyramine for additive antihyperlipidemic effects (Jones & Bartlett Learning, 2021).	toxicity and serious arrhythmias (Jones & Bartlett, 2021)		achieve optimum pain control with the lowest possible fentanyl dose, also plan to give a nonopioid analgesic, such as acetaminophen, as prescribed (Jones & Bartlett, 2021)	pressure (Jones & Bartlett, 2021)	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Obtain baseline cholesterol, triglycerides, and liver function tests. Monitor liver function and creatine kinase level. assess for signs of muscle weakness or pan. Monitor for EKG (Jones & Bartlett Learning, 2021).	Check vital signs, especially the apical pulse for a full minute. Monitor potassium levels (Jones & Bartlett, 2021)	Complete blood count and gastric PH should be monitored. Any allergies to medication (Jones & Bartlett, 2021)	Monitor baseline vitals (Jones & Bartlett, 2021)	Monitor vital signs, and weight paints daily. Monitor CBC, and lupus erythematosus cell preparation before therapy (Jones & Bartlett, 2021)	
Client Teaching needs (2)	Take medication at the same time each	Emphasize the importance of taking digoxin exactly as	Famotidine should not be taken with other acid-reducing	Caution patients to avoid hazardous	Urge patient to report numbness and tingling	

	day to maintain its effects. Emphasize that atorvastatin is an adjunct to-not a substitute for-a low-cholesterol diet (Jones & Bartlett Learning, 2021).	prescribed. Warn about possible toxicity from taking too much and decreased effectiveness from taking too little (Jones & Bartlett, 2021)	products. Caution patient, especially the elderly and patients with renal impairment to avoid hazardous activities until drug's CNS effects are (Jones & Bartlett, 2021) known	activities until drug's CNS effects are known. Tell patient to increase fiber and fluid intake, unless contraindicated because drug may cause severe constipation (Jones & Bartlett, 2021)	in limbs. Notify prescriber about fever, joint and muscle aches, and sore throat (Jones & Bartlett, 2021)	

Medications Reference (1) (APA): Jones & Bartlett Learning. (2021). *2021 Nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Alert and responsive to person, place, situation. Patient was very fatigued No acute distress, and well groomed
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:**	Usual for ethnicity Intact, dry Warm Normal elasticity No rashes No bruising

Bruises: **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	1-14-2024 wound present; lower; midline abdomen puncture 15
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Normocephalic and atraumatic No abnormal findings present. PERRLA present, EOM intact The patient has a NG tube in place No dentures. Obtained what I could in the charts.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	Was not able to obtain all the information because the patient stated to the nurse and I that he did not want to be touched. The nurse stated we could try again later. The capillary refills were less than 3 seconds. Intact pulse 3+. Obtained what I could in the charts.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** **Placement (cm to lip):** **Respiration rate:** **FiO2:** **Total volume (TV):** **PEEP:** **VAP prevention measures:**	Mild dyspnea noted. The patient was a little short of breath. Was not able to obtain all this information due to the nurse stating the patient did not want to be touched. Obtained what I could in the charts
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:**	Regular diet NPO 5'11 238 lbs. Active bowel sounds Patient did not have a bowel movement during the time this student was present. No distention No incisions No scars No drains

Scars: **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☒ N ☐** **Size: 18** **Feeding tubes/PEG tube Y ☒ N ☐** **Type:** Gastric decompression/feeding administration	
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** **Size:** **CAUTI prevention measures:**	Color: Yellow Character: Clear Quantity: The patient had an output of 325 mL using a catheter Pain: No pain upon urination Inspection of genitals: Intact The patient has a urethral catheter. Size: 16 Fr Cath care, keeping it clean and free of germs. Position the bag below bladder level, and off the floor.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk**☒	Marked pitting edema bilateral in the upper and lower extremities. Pulses 2+ regular and symmetric, bilateral 3+ pitting pedal edema, no calf pain or tenderness. Fall score is 14. Patient does not use any assistive devices, active ROM. Active mobility. The patient is bedbound.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient is alert to person, place, and situation. Normal cognition, speech clear. Normal sensory. Alert and answer all questions asked of him. The patient was very fatigued, no LOC noted.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):**	Could not obtain all the information the patient wanted to sleep and wanted to be left alone.

Developmental level: **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Developmental level: Appropriate for age This student nurse asked the wife does the husband practices any religion, the wife stated they do not practice any religion. The patient lives at home with his wife, the wife stated the patient has a lot of support from family.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700 am	108	140/67	24	was not charted	92
1200 pm	114	124/60	25	Was not charted	94

Vital Sign Trends/Correlation: The patient pulse level was not in normal ranges (60-100) it was high and continued to increase in the second set of vitals. The patients blood pressure was a little elevated but did come back down in the second set of vitals and after receiving medication. The patient's respiratory rate stayed consistent. The patient's temperature was not obtained and was not charted during this clinical rotation. The patient's oxygen level stayed consistent was stayed over 90%, which is good.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

0700 am	The patient stated he was not in any pain	The patient stated he was not in any pain	The patient stated he was not in any pain	The patient stated he was not in any pain	The patient stated he was not in any pain
1200 pm	The patient stated he was not in any pain	The patient stated he was not in any pain	The patient stated he was not in any pain	The patient stated he was not in any pain	The patient stated he was not in any pain

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	Saline lock Peripheral IV 1-14-2024; 20 G; anterior; right antecubital Peripheral IV 1-14-2024; 18 G; anterior; right hand Peripheral IV 1-14-2024; 18 G; anterior; right upper arm Peripheral IV 1-14-2024; 18G; anterior; lower right forearm There are no signs of erythema, no drainage noted. IV dressing was clean and dry. IV was patent.
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:** **Date of insertion:** **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☒ N ☐** **CLABSI prevention measures:**	Patient had a urethral catheter in place; 16 Fr NG/feeding tube gastric decompression; feeding administration 1-14-2024. There were no signs of erythema noted, drainage noted, everything was clean intact. No PICC, central lines in place.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
The nurse stated that the patient was currently NPO status	The patient has a urinary catheter (catheter balloon) in place. The patient's output was

	325 mL.

Nursing Care

Summary of Care (2 points)

Overview of care: The patient was very fatigued. This student nurse assisted the nurse in administering the patient's medication at 9:00 a.m. and did what we could to complete a head-to-toe assessment. I emptied the patient's catheter bag, the patient's family came in to visit him, so the nursing student and nurse left the room to give them some privacy.

Procedures/testing done: No procedure or testing was done during this clinical rotation.

Complaints/Issues: There were no complaints or issues.

Vital signs (stable/unstable): The patients vital signs remain stable during this clinical rotation.

Tolerating diet, activity, etc.: The patient is NPO status.

Physician notifications: None

Future plans for client: The patient will do the necessary precautions to stay healthy and maintain a health weight. The patient will continue to take prescribed medications. The patient will be aware of and signs and symptoms of bleeding or pertaining to the chief complaint for which the patient came in. The patient will go to the emergency department if they are feeling and weakness, excessive fatigue.

Discharge Planning (2 points)

Discharge location: The patient will go home with his wife.

Home health needs (if applicable): None.

Equipment needs (if applicable): None.

Follow up plan: The patient needs to call the provider as soon as he is feeling any signs and symptoms again.

Education needs: The patient needs education on the signs and symptoms to look for if he experiences signs of fatigue or a fall again. Education on healthy alternative meals so that the patient can maintain a weight that is healthy. The patient should receive medication education of any new or existing ones. The patient should take medication as prescribed.

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	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

by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client				plan.
Risk for injury related to generalized weakness as evidenced by the patient falling due to excessive fatigue (Phelps, 2020).	This nursing diagnosis was chosen because the patient chief complaint was that he came in for a fall and it stated in his history or present illness that he fell due to excessive fatigue (Phelps, 2020).	1. Implement fall precautions (Phelps, 2020). 2. Complete hourly rounding and ensure the call-light is within reach (Phelps, 2020).	1. The patient will press his call-light and wait for help before getting out of bed (Phelps, 2020).	The patient accepts the nursing actions given to him and will do as he should to prevent injury (Phelps, 2020).
At risk for bleeding related to trauma as evidenced by the patient having a subarachnoid hemorrhage, intraventricular hemorrhage and an abdominal hemorrhage (Phelps, 2020).	This nursing diagnosis was chosen because the diagnostic test showed the patient had a subarachnoid hemorrhage, intraventricular hemorrhage, and abdominal hemorrhage as an result of trauma (Phelps, 2020).	1. Administer bleeding precautions (Phelps, 2020). 2. Monitor and manage potential complications (Phelps, 2020).	The patient will be free from signs of active bleeding. The patient will demonstrate measures to prevent bleeding (Phelps, 2020).	The patient verbalized understanding of measures to prevent bleeding. The patient will report any signs of bleeding to their healthcare provider (Phelps, 2020).
Decreased cardiac output related to hypertension as	This nursing diagnosis was chosen because the	1. Administer prescribed medication as ordered	1. The patient will maintain blood pressure within acceptable limits	The patient accepts the nursing actions given to him and will do his part to

evidenced by patient having an increased blood pressure of 140/67 (Phelps, 2020).	patient has a history of hypertension, and his blood pressure was 140/67 (Phelps, 2020).	(Phelps, 2020). 2. Check vital signs when rounding (Phelps, 2020).	(Phelps, 2020).	keep his blood pressure levels within normal range (Phelps, 2020).
Risk for impaired skin integrity related to patient physical immobilization as evidenced by the patient experiencing bedrest (Phelps, 2020).	This nursing diagnosis was chosen because the patient is on bedrest and without frequent ambulation, the patient is as risk for skin breakdown (Phelps, 2020).	1. Reposition the patient every 2 hours to prevent skin breakdown (Phelps, 2020). 2. Complete a skin assessment to monitor and prevent skin integrity (Phelps, 2020).	The patient will maintain intact skin integrity (Phelps, 2020).	The patient accepts the nursing actions provided to him and the family. The patient will assist in the prevention of skin breakdown (Phelps, 2020).
Impaired physical mobility related to sedentary lifestyle as evidenced by the patient weight being 238 lbs. (Phelps, 2020).	This nursing diagnosis was chosen due to the patient's weight being 238 lbs. which mean he is considered obese (Phelps, 2020).	1. Provide passive range of motion (Phelps, 2020). 2. promote proper nutrition and hydration (Phelps, 2020).	1. The patient will participate in passive range of motion exercise as much as they can tolerate. The patient will maintain a healthier source of foods and hydration to assist in lowering their weight (Phelps, 2020).	The patient accepts the nursing actions from the nurse. The patient will improvement his activity level along with eating healthier food and drink sources (Phelps, 2020).

Other References (APA):

Phelps, L. L. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual*. Wolters Kluwer.

Concept Map (20 Points):

Subjective Data

The patient stated he was tired. The patient stated he did not want to be touched to do a proper assessment, so the nurse said we'll come back later.

Objective Data

The patient blood pressure was at 0700 was 140/67, the patient pulse was elevated at 108.
The patient vitals remain stable at 1200.
The patient showed no signs of pain.
The patient remained on a NPO status.
The patient showed signs of dyspnea.

Client Information

Date of Admission: 1-14-2024
Client Initials: H.K
Age: 71
Gender: Male
Race/Ethnicity: Caucasian
Occupation: Owner of Kuhn equipment Co
Marital Status: Married
Allergies: No known
Code Status: Full code
Height: 5'11
Weight: 238 lbs.

Nursing Diagnosis/Outcomes

1. Risk for injury related to generalized weakness as evidence by the patient falling due to excessive fatigue.
   - The patient will press his call-light and wait for help before getting out of bed.
2. At risk for bleeding related to trauma as evidence by the patient having a subarachnoid hemorrhage, intraventricular hemorrhage and an abdominal hemorrhage.
   - The patient will be free from signs of active bleeding. The patient will demonstrate measures to prevent bleeding.
3. Decreased cardiac output related to hypertension as evidence by patient having an increased blood pressure of 140/67.
   - The patient will maintain blood pressure within acceptable limits.
4. Risk for impaired skin integrity related to patient physical immobilization as evidence by the patient experiencing bedrest.
   - The patient will maintain intact skin integrity.

5. Impaired physical mobility related to sedentary lifestyle as evidence by the patient weight being 238 lbs.
   - The patient will participate in passive range of motion exercise as much as they can tolerate. The patient will maintain a healthier source of foods and hydration to assist in lowering their weight.

Nursing Interventions

1. Implement fall precautions. 2. Complete hourly rounding and ensure the call-light is within reach.
3. Administer bleeding precautions. 4. Monitor and manage potential complications.
5. Administer prescribed medication as ordered. 6. Check vital signs when rounding.
7. Reposition the patient every 2 hours to prevent skin breakdown. 8. Complete a skin assessment to monitor and prevent skin integrity.
9. Provide passive range of motion. 10. promote proper nutrition and hydration.