N441 Care Plan

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 04/04/2022	**Client Initials** W.M.A.	**Age** 80	**Gender** Male
Race/Ethnicity White/Caucasian	**Occupation** Retired Union Construction Worker	**Marital Status** Single	**Allergies** Aspirin: Anaphylaxis Carvedilol (Coreg): Bradycardia/Intolerance Ibuprofen: Pruritus
Code Status Full Code	**Height** 5'8"	**Weight** 130 lbs.	

Medical History (5 Points)

Past Medical History: Atrial fibrillation, Anemia, Arthritis, Chronic kidney disease, Congestive heart failure, Type 2 diabetes mellitus, End-stage renal disease, Chronic obstructive pulmonary disease, Benign prostatic hyperplasia, and Hypertension

Past Surgical History: Appendectomy in 1959, Inguinal hernia repair in 1990, and a vascular/cardiac catheterization and angiogram AV shunt dialysis fistula on 11/24/2020.

Family History: The patient has a maternal family history of congestive heart failure. The patient reports that his mother is now deceased.

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

The patient reports smoking half of a pack of cigarettes per day since he was twenty but quit three years ago. The patient denies the use of smokeless tobacco. The patient reports that he drank a six-pack of beer (bottles) per day for ten years but quit six months ago. The patient denies the use of recreational drugs upon questioning.

Assistive Devices:

Upon questioning, the patient denies using any assistive devices, such as a walker, wheelchair, or cane, to assist with ambulation.

Living Situation: The patient reports living in a two-story home by himself.

Education Level: The patient reports only obtaining a high school diploma.

Admission Assessment

Chief Complaint (2 points): Weakness, Lightheadedness, and Dizziness

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

The patient presenting to the emergency room is an 80-year-old male with a past medical history of anemia, congestive heart failure, end-stage renal disease, type 2 diabetes mellitus, and chronic obstructive pulmonary disease. The patient presents with a chief complaint of weakness, lightheadedness, and dizziness that began around 1100 on 04/04/2022 at his local grocery store. The patient reports that he was recently discharged from the hospital on 03/30/2022 for congestive heart failure and fluid volume overload management/treatment. The patient was also at the hospital for hemodialysis due to having end-stage renal disease. During this time, the patient experienced fluctuating blood pressures. After being discharged from the hospital on 03/30, the patient reported feeling “fine” until the morning of 04/04/2022. Around 1100 on 04/04/2022, the patient reported going to the IGA in Paxton. Once he reached the check-out line, he began to feel lightheaded, weak, and dizzy. The patient then reported sitting in a chair provided by the employees and fainted soon after for a brief period. The patient woke back up soon after fainting and was transported to OSF hospital in Urbana. Upon arrival at the emergency room and questioning, the patient could not determine the amount of time he was passed out. Upon further questioning, the patient denied the presence of chest pain, fever, cough, shortness of breath, and chills. The patient reported not drinking any fluids the morning of the syncope and collapse episode. Upon physical assessment, the patient’s breath sounds and rate and heart sounds and rate were within normal limits. Upon multiple blood pressure measurements on the way to the hospital and in the emergency room, the patient’s blood pressure readings consistently

read below 90/60 mmHg. However, the patient's skin appeared tented and somewhat pale. This finding indicates and confirms that the patient was dehydrated. The patient was then ordered to receive blood work to measure his labs and 0.9% NaCl via IV at 100 mL/hr for fluid resuscitation after determining the patient experienced syncope and collapse due to severe dehydration and hypotension.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Hypotension

Secondary Diagnosis (if applicable): N/A

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

Hypotension is when an individual's blood pressure falls below 90/60 mmHg for numerous reasons (Hinkle & Cheever, 2018). Low blood pressure can be caused due to dehydration, exposure to excessive heat, emotional stress, diabetes, heart problems, fear, allergic reactions, arrhythmias, myocardial infarctions, and pulmonary embolisms. Certain nervous system disorders can also cause hypotension, such as spinal cord injuries, multiple sclerosis, and Parkinson's disease (Hinkle & Cheever, 2018). Antihypertensives, diuretics, antidepressants, and erectile dysfunction medications can also induce hypotension due to dilation of the blood vessels (Hinkle & Cheever, 2018).

Signs and symptoms of hypotension include lightheadedness, dizziness, a feeling of passing out, weakness or fatigue, clammy skin, blurred vision, lethargy, agitation, and nausea (Capriotti, 2020). Upon questioning the patient, he reported feeling light-headed, weak, and dizzy before fainting. The patient also reported not drinking many fluids that same morning of the syncope and collapse episode at his local grocery store. A common physiological finding with hypotension is a blood pressure reading below 90/60 mmHg upon multiple measurements.

Typical and expected lab findings with hypotension include a low red blood cell count and high blood glucose levels (Hinkle & Cheever, 2018).

Diagnostic procedures performed on patients to confirm hypotension are multiple low blood pressure measurements below 90/60 mmHg and lab testing. Lab testing can be completed to determine underlying issues causing the patient's low blood pressure readings (Hinkle & Cheever, 2018). Upon multiple blood pressure measurements on the way to the hospital and in the emergency room, the patient's blood pressure readings consistently read below 90/60 mmHg. Labs were also performed on the patient shortly after arrival at the emergency department. The patient has a past medical history of diabetes and anemia, contributing significantly to the onset of low blood pressure (Hinkle & Cheever, 2018). As a result of the patient's lab testing, the patient's red blood cell count read 3.13 10(6)/mcL. This reading is below the reference range of 4.40-5.80 10(6)/mcL, indicating the presence of anemia. The patient's blood glucose level read 132 mg/dL. This reading is above the reference range of 70-99 mg/dL (Hinkle & Cheever, 2018).

Hypotension can be treated in a couple of ways. Hypotension can be treated by administering medications to increase the patient's blood pressure, such as midodrine. Midodrine prevents the ability of the blood vessels to dilate, in turn causing an increase in an individual's blood pressure (Jones & Bartlett Learning, 2020). Another way hypotension can be treated is via IV fluid resuscitation, such as with 0.9% NaCl, blood transfusions, or plasma transfusions (Hinkle & Cheever, 2018). Upon arrival to the emergency room and after further physical assessment, the patient was ordered to receive 0.9% NaCl IV fluids at 100 mL/hr for fluid resuscitation. Fluids were ordered after determining the patient experienced lightheadedness, dizziness, and weakness with resulting syncope and collapse due to hypotension from severe dehydration.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.).

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 10(6)/mcL	3.13 10(6)/ mcL	3.05 10(6)/mcL	The patient's RBC count is low due to the patient's past medical history of chronic kidney disease, anemia, and end-stage renal disease (Pagana & Pagana, 2018). Additionally, the patient was currently having his blood volume replenished through IV fluids when these labs were drawn. This can cause his RBC count to decrease (Pagana & Pagana, 2018).
Hgb	13-16.5 g/dL	9.8 g/dL	9.8 g/dL	The patient's hemoglobin levels are below the normal range due to a past medical history of chronic kidney disease, anemia, and end-stage renal disease. Additionally, hemoglobin levels are low because it reflects RBC numbers and because the patient was currently having his blood volume replenished through IV fluids when these labs were drawn. This can cause his RBC count to decrease, decreasing

				hemoglobin levels (Pagana & Pagana, 2018).
Hct	38-50%	29%	28.4%	The patient's hematocrit levels are reduced due to a past medical history of chronic kidney disease, anemia, and end-stage renal disease. Additionally, hematocrit levels are low because it reflects RBC numbers and because the patient was currently having his blood volume replenished through IV fluids when these labs were drawn. This can cause his RBC count to decrease, decreasing hematocrit levels (Pagana & Pagana, 2018).
Platelets	140,000-440,000 k/cumm	203,000 k/ cumm	200,000 k/ cumm	
WBC	4-12 10(3)/mcL	4.60 10(3)/ mcL	4.30 10(3)/mcL	
Neutrophils	40-68%	65%	55.8%	
Lymphocytes	19-49%	19.9%	21.5%	
Monocytes	3-13%	12.7%	13%	
Eosinophils	0-8%	1.2%	2.7%	
Bands	< or = to 10%	N/A	N/A	

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	133-144 mmol/L	138 mmol/ L	137 mmol/L	
K+	3.5-5.1 mg/dL	3.8 mg/dL	5.2 mg/ dL	Serum potassium levels are slightly elevated due to past medical histories of chronic kidney disease and end-stage renal disease (Pagana & Pagana, 2018).
Cl-	98-107 mmol/L	98 mmol/L	98 mmol/L	
CO2	21-31 mmol/L	31 mmol/L	25 mmol/L	

Glucose	70-99 mg/dL	178 mg/dL	148 mg/dL	Blood glucose levels are increased due to a past medical history of type 2 diabetes mellitus and stress from being in the hospital. The patient's blood glucose levels were previously elevated on admission to the emergency department due to dehydration. Dehydration causes the sugar in the bloodstream to become more concentrated. The patient's blood glucose levels are also elevated due to bumetanide administration during the hospital stay. Bumetanide is a loop diuretic that can cause high blood sugar levels (Pagana & Pagana, 2018).
BUN	7-25 mg/dL	25 mg/dL	49 mg/dL	BUN levels are elevated due to the patient's past medical history of congestive heart failure, chronic kidney disease, end-stage renal disease, and benign prostatic hypertrophy. Benign prostatic hypertrophy obstructs urine flow, which, in turn, reduces urine excretion and elevates BUN levels (Pagana & Pagana, 2018).
Creatinine	0.5-1.2 mg/dL	3.82 mg/dL	5.27 mg/dL	Creatinine levels are elevated due to dehydration and the patient's past medical history of type 2 diabetes mellitus, hypertension, chronic kidney disease, and end-stage renal disease. In type 2 diabetes mellitus, if blood sugar levels get too high, the kidneys can become damaged, which leads to elevated creatinine levels (Pagana & Pagana, 2018). Hypertension can cause damage to the blood vessels of the kidneys, making the kidneys malfunction, leading to high serum creatinine levels (Pagana & Pagana, 2018). In chronic kidney disease and end-stage renal disease, the kidneys are damaged and have trouble removing creatinine from the blood, increasing serum creatinine levels (Pagana &

				Pagana, 2018).
Albumin	3.5-5.7 g/dL	3.9 g/dL	3.8 g/dL	
Calcium	8.6-10.3 mg/dL	8.9 mg/dL	8.2 mg/dL	The patient's serum calcium level is reduced due to past medical histories of chronic kidney disease and end-stage renal disease. Calcium levels are also reduced from bumetanide administration during the hospital stay (Pagana & Pagana, 2018). Bumetanide is a loop diuretic that can cause low serum calcium levels (Jones & Bartlett Learning, 2020).
Mag	1.6-2.3 mg/dL	N/A	N/A	
Phosphate	2.5-4.5 mg/dL	N/A	5.7 mg/dL	The patient's serum phosphate level is elevated due to their past medical history of chronic kidney disease, end-stage renal disease, and decreased calcium levels. Phosphate and calcium have an inverse relationship. When calcium levels are low, phosphate levels are high (Pagana & Pagana, 2018).
Bilirubin	0.2-0.8 mg/dL	0.5 mg/dL	N/A	
Alk Phos	34-104 U/L	86 U/L	N/A	
AST	13-39 U/L	15 U/L	N/A	
ALT	7-52 U/L	16 U/L	N/A	
Amylase	30-220 Units/L	N/A	N/A	
Lipase	0-160 Units/L	N/A	N/A	
Lactic Acid	Venous Blood: 5-20 mg/dL Arterial Blood: 3-7 mg/dL	N/A	N/A	

Troponin	0.000-0.070 ng/mL	N/A	N/A		
CK-MB	0%	N/A	N/A		
Total CK	24-173 Units/L	N/A	N/A		

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	0.9-1.1	2.7	2.5	The patient's INR is high due to being on warfarin therapy (Pagana & Pagana, 2018).
PT	9.1-12.0 seconds	N/A	N/A	
PTT	24-33 seconds	N/A	N/A	
D-Dimer	<0.4 mcg/mL	N/A	N/A	
BNP	< 100 ng/L	N/A	N/A	
HDL	>55 mg/dL	N/A	N/A	
LDL	<130 mg/dL	N/A	N/A	
Cholesterol	<200 mg/dL	N/A	N/A	
Triglycerides	35-135 mg/dL	N/A	N/A	
Hgb A1c	4.8-5.6%	N/A	N/A	
TSH	0.450-4.500 mclU/mL	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	Low/light yellow; low clear	N/A	N/A	

pH	5-7	N/A	N/A	
Specific Gravity	1.001-1.030	N/A	N/A	
Glucose	Low negative	N/A	N/A	
Protein	Low negative	N/A	N/A	
Ketones	Low negative	N/A	N/A	
WBC	0-5/high power field	N/A	N/A	
RBC	0-2/high-power field	N/A	N/A	
Leukoesterase	Low negative	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	N/A	N/A	
PaO2	80-100 mmHg	N/A	N/A	
PaCO2	35-45 mmHg	N/A	N/A	
HCO3	21-28 mEq/ L	N/A	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	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.).

Pagana, T. J., & Pagana, K. D. (2018). *Mosby's manual of diagnostic and laboratory tests* (6th ed.). Elsevier-Health Sciences Division.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

The only other diagnostic procedure performed during the patient's hospital stay was a CT scan of the head/brain without contrast. It was completed on 04/04/2022 at 1449.

Diagnostic Test Correlation (5 points):

A CT scan of the head/brain without contrast aims to help diagnose multiple brain conditions such as bleeding, infarction, ischemia, hematomas, and tumors. This is done by observing the CT scanner's multiple x-ray images taken of the brain at different layers. By visualizing the brain at different layers, it allows the healthcare team to see all of the contents of the cranium (Pagana & Pagana, 2018). A CT scan of the head/brain without contrast was completed on this patient a couple of hours after arrival at the emergency department. It was completed to observe for any signs of infarction, hemorrhage, lesions, edema, or any other intracranial abnormality that possibly contributed to the patient's syncope and collapse episode. As a result of the CT scan, mild generalized atrophy and intracranial atherosclerosis were

visualized. Intracranial atherosclerosis could have played a role in the patient's lightheadedness, dizziness, syncope, and collapse episode as plaque in the cranial arteries can decrease blood flow to the brain (Hinkle & Cheever, 2018). No signs of infarction, intracranial hemorrhage, lesions, or edema were visualized upon CT scan result visualization.

Diagnostic Test Reference (1) (APA):

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

Pagana, T. J., & Pagana, K. D. (2018). *Mosby's manual of diagnostic and laboratory tests* (6th ed.). Elsevier-Health Sciences Division.

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

Home Medications (5 required)

Brand/Generic	acetaminophen (Tylenol)	calcium carbonate (TUMS)	aspirin/ acetylsalicylic acid (Bayer)	ondansetron hydrochloride (Zofran)	C XR Hy
Dose	650 mg	1,000 mg	81 mg tablet	4 mg	
Frequency	Q4hr PRN	Q8hr PRN	Once daily	Q6hr PRN	C
Route	PO	PO	PO	PO	
Classification	Nonsalicylate, paraaminophenol derivative;	Calcium salt; Antacid	Salicylate/NSAID (anti-inflammatory, antiplatelet,	Selective serotonin (5-HT3) receptor	B Ar

	Antipyretic, nonopioid analgesic		antipyretic, non-opioid analgesic)	antagonist; Antiemetic	
Mechanism of Action	Tylenol prevents the production of the enzyme cyclooxygenase. This action, in turn, prevents the production of prostaglandin and interferes with the generation of pain impulses coming from the peripheral nervous system (Jones & Bartlett Learning, 2020).	Calcium carbonate increases intracellular and extracellular calcium levels. This is needed to maintain homeostasis. Oral forms of calcium neutralize stomach acid to relieve hyperacidity discomfort (Jones & Bartlett Learning, 2020).	Aspirin blocks cyclooxygenase activity. Cyclooxygenase is an essential enzyme required for the synthesis of prostaglandin. Prostaglandins are a crucial aspect of the inflammatory response. Prostaglandins cause the dilation of blood vessels leading to swelling ad pain. Since aspirin causes the inhibition of cyclooxygenase and prostaglandins, inflammatory symptoms such as pain and swelling will eventually subside (Jones & Bartlett Learning, 2020).	Zofran blocks serotonin receptors at vagal nerve terminals located in the intestines and chemoreceptor trigger zones. This will reduce episodes of nausea and vomiting by simply preventing the release of serotonin in the intestine and preventing signals from reaching the CNS (Jones & Bartlett Learning, 2020).	
Reason Client Taking	Mild pain (pain rated 1-3 on a 0-10 numeric pain scale) to severe pain	Heartburn, indigestion	Mild pain relief; Headache	Nausea	
Contraindications (2)	Hypersensitivity to acetaminophen and those with	Hypercalcemia, renal calculi, and ventricular	Hypersensitivity to aspirin. Active bleeding or	Hypersensitivity to ondansetron and those with	

	severe hepatic impairment (Jones & Bartlett Learning, 2020).	fibrillation (Jones & Bartlett Learning, 2020).	coagulation disorders (Jones & Bartlett Learning, 2020).	hypokalemia or hypomagnesemia (Jones & Bartlett Learning, 2020).	c Ac
Side Effects/Adverse Reactions (2)	Hepatotoxicity, neutropenia, thrombocytopenia, hypokalemia, hypomagnesemia, and hypophosphatemia (Jones & Bartlett Learning, 2020).	Hypotension and hypercalcemia (Jones & Bartlett Learning, 2020).	Hepatotoxicity Prolonged bleeding time (Jones & Bartlett Learning, 2020).	Hypotension, tachycardia, serotonin syndrome, arrhythmias, intestinal obstruction, anaphylaxis, and bronchospasm (Jones & Bartlett Learning, 2020).	L Hy and lev
Nursing Considerations (2)	Monitor the patient's serum potassium, magnesium, phosphate, neutrophil, and platelet levels as a decrease in all are possible adverse effects of acetaminophen. Monitor liver function tests, such as AST, ALT, bilirubin, and creatinine. An excessive amount of acetaminophen can contribute to the development of hepatotoxicity (Jones & Bartlett Learning, 2020).	Store this medication at room temperature. However, it is essential to protect it from heat, light, and moisture. Another nursing consideration would be to assess the patient for any of the contraindications previously mentioned (Jones & Bartlett Learning, 2020).	Do not crush delayed-release forms of this medication unless directed. Ask the patient if they are experiencing ringing in their ears. Ringing in the ears typically occurs if serum levels of this medication exceed its maximum dosage to achieve its purpose (Jones & Bartlett Learning, 2020).	Monitor the patient for hypersensitivity reactions to ondansetron, such as anaphylaxis and bronchospasm. If these symptoms occur, the healthcare team needs to stop giving this medication and notify the provider immediately. In addition to discontinuing the drug and notifying the provider, supportive care must be provided to ensure comfort and safety. Monitor the	H as pati hy d Th inc de n pati b lev t cor

				patient for serotonin syndrome. Serotonin syndrome manifests as restlessness, confusion, shaking, tremors, diaphoresis, agitation, and poor coordination (Jones & Bartlett Learning, 2020).	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Before administration, assess the patient's pain level. Before administration, monitor the patient's serum potassium, magnesium, phosphate, neutrophil, and platelet level as acetaminophen may cause decreased levels. Before administration, monitor liver function tests, such as AST, ALT, bilirubin, and creatinine, as acetaminophen may cause elevated levels (Jones & Bartlett Learning, 2020).	Before administration, it is essential to monitor the patient's serum calcium levels because this medication can cause hypercalcemia. It would also be crucial to obtain the patient's baseline blood pressure because this medication can cause hypotension (Jones & Bartlett Learning, 2020).	Check the patient for any signs of bleeding before giving aspirin or allergies to this medication. An important lab to check before administering aspirin is the patient's platelet level (Jones & Bartlett Learning, 2020).	Before administration, measure the patient's blood pressure and heart rate as hypotension and tachycardia are potential adverse effects of ondansetron. Monitor the patient's serum magnesium and potassium levels before administration (Jones & Bartlett Learning, 2020).	ad pat su d r ad is M pl ad me pl
Client Teaching needs (2)	Educate the patient to take	First, inform the patient to chew	Educate the patient to discontinue their	Educate the patient to	E pa

	acetaminophen exactly as directed on the label or prescribed. This will help prevent liver damage. Educate the patient to avoid taking other medications that contain acetaminophen. If other medicines contain acetaminophen, "APAP" will be seen somewhere on the label. A fatal overdose will most likely result if acetaminophen is taken with other drugs containing this (Jones & Bartlett Learning, 2020).	these tablets before swallowing them and follow them with a glass of water. It is also essential to educate the patient to take this medication approximately 1 to 2 hours after meals (Jones & Bartlett Learning, 2020).	aspirin use and contact their primary healthcare provider if they begin experiencing bloody stools or cough up blood. This is a sign of intestinal or stomach bleeding. Instruct the patient to take this medication with meals or after meals. Taking it on an empty stomach will cause the stomach to become upset (Jones & Bartlett Learning, 2020).	promptly report any signs of an allergic reaction to the medication, such as bronchospasm. Educate the patient to get medical attention immediately if they experience severe or worsening symptoms (Jones & Bartlett Learning, 2020).	

Hospital Medications (5 required)

Brand/Generic	amlodipine besylate (Norvasc)	atorvastatin calcium (Lipitor)	albuterol - ipratropium/ salbutamol sulphate / albuterol sulfate (AccuNeb)	warfarin sodium (Coumadin)	bumetanide (Bumex)
Dose	10 mg	80 mg	3 mL	4 mg	4 mg
Frequency	Once daily	QHS	Q6hr PRN	Once daily	Once daily

Route	PO	PO	Nebulizer inhaler	PO	PO
Classification	Calcium channel blocker; Antianginal, antihypertensive	HMG-CoA Reductase Inhibitor/ Antihyperlipidemic; Antihypertensive	Adrenergic; Bronchodilator	Coumarin derivative; Anticoagulant	Loop diuretic as sulfonamide derivative; Diuretic
Mechanism of Action	Amlodipine binds to dihydropyridine and nondihydropyridine cell membrane receptor sites. These are located on myocardial and vascular smooth muscle cells. This medication also prevents the influx of extracellular calcium ions across slower calcium channels. This action reduces the intracellular calcium level, preventing the contraction of smooth muscle cells. This action also relaxes the vascular and coronary smooth	Reduces plasma cholesterol and lipoprotein levels by preventing HMG-CoA reductase and cholesterol synthesis in the liver. It also works by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown (Jones & Bartlett Learning, 2020).	Albuterol attaches itself to beta 2 receptors on the cell membranes of the bronchial. This action stimulates adenylate cyclase to convert ATP to cAMP (cyclic adenosine monophosphate). This conversion decreases calcium levels within the cells. It will also increase cAMP levels within the cells. These effects will cause the bronchial	Warfarin prevents the liver's ability to create clotting factors 2, 7, 9, and 10. By preventing the production of clotting factors, warfarin prevents coagulation and promotes thinning of the blood (Jones & Bartlett Learning, 2020).	Bumetanide prevents chloride, sodium, and water reabsorption in the loop of Henle. This action promotes the elimination of these electrolytes and fluid, reducing fluid volume (Jones & Bartlett Learning, 2020).

	muscles. As a result, there is a decrease in peripheral vascular resistance and systolic and diastolic blood pressure (Jones & Bartlett Learning, 2020).		smooth muscle cells to relax and prevent histamine release (Jones & Bartlett Learning, 2020).		
Reason Client Taking	Hypertension	Hypertension	COPD; Shortness of breath and wheezing	Atrial fibrillation	Congestive heart failure
Contraindications (2)	Those with an allergy to amlodipine and severe liver disease (Jones & Bartlett Learning, 2020).	Hypersensitivity to atorvastatin or its components and active hepatic disease (Jones & Bartlett Learning, 2020).	Hypersensitivity to albuterol and ipratropium bromide; Hypersensitivity to peanuts (Jones & Bartlett Learning, 2020).	Cerebrovascular hemorrhage and hypersensitivity to warfarin or its components (Jones & Bartlett Learning, 2020).	Anuria and hypersensitivity to bumetanide or its components (Jones & Bartlett Learning, 2020).
Side Effects/Adverse Reactions (2)	Arrhythmias and hypotension (Jones & Bartlett Learning, 2020).	Arrhythmias and Hypoglycemia (Jones & Bartlett Learning, 2020).	Arrhythmias, bronchospasm, and hypokalemia (Jones & Bartlett Learning, 2020).	Hypotension, nausea, and hematuria (Jones & Bartlett Learning, 2020).	Hypotension, hypocalcemia, hypochloremia, hypokalemia, hyponatremia, and hyperglycemia (Jones & Bartlett

					Learning, 2020).
Nursing Considerations (2)	Use this medication cautiously in those with a narrow aorta, heart failure, or heart block. Monitor the patient's blood pressure frequently when adjusting the medication dosage because symptomatic hypotension can occur (Jones & Bartlett Learning, 2020).	Monitor blood sugar levels in diabetic patients because this medication can affect blood sugar control. Expect liver function tests to be done when a patient is on this medication. They will be done before starting the medication and after being given the medication as necessary (Jones & Bartlett Learning, 2020).	It is essential to monitor the patient's serum potassium levels consistently because this medication can cause low serum potassium. It is also vital to be careful when administering this medication to someone with high blood pressure because it can worsen their condition (Jones & Bartlett Learning, 2020).	Avoid administering warfarin intramuscularly as this can lead to bleeding and hematomas. Frequently monitor the patient's INR levels to assess the effectiveness of warfarin. Expect the patient with atrial fibrillation to take warfarin for up to 1-3 months (Jones & Bartlett Learning, 2020).	Monitor blood sugar levels in diabetic patients because bumetanide can cause elevations in blood sugar levels. Assess fluid and electrolyte balance frequently because bumetanide is a strong diuretic that can cause fluid and electrolyte imbalances. Monitor the patient's fluid intake and output throughout the day, specifically every 8 hours. Monitor the patient's serum potassium levels during medication therapy as hypokalemia can arise (Jones &

					Bartlett Learning, 2020).
Key Nursing Assessment(s)/Lab(s) Prior to Administration	The primary assessment before taking this medication is of the patient's heart rate and blood pressure (Jones & Bartlett Learning, 2020). There are currently no labs that need to be monitored before administering amlodipine.	Before administration, assess the patient's blood sugar levels as this medication can cause hypoglycemia (Jones & Bartlett, 2020). Before administration, monitor the patient's platelet count and liver enzymes. This medication can cause thrombocytopenia and elevated liver enzymes (Jones & Bartlett Learning, 2020).	Assess the patient's heart rate, respiratory rate, breath sounds, and pulse oximetry. Monitor for wheezing, difficulty breathing, or a feeling of tightness in the chest before administration. The predominant lab to look at before administering this medication is serum potassium. It is essential to monitor the patient's serum potassium levels because if it is below the normal range when the patient	Before administration, assess the patient's blood pressure as warfarin has a possible adverse effect of hypotension. Before administration, monitor the patient's urine color and for nausea as warfarin can cause hematuria and nausea (Jones & Bartlett Learning, 2020).	Before administration, monitor the patient's blood sugar levels. Bumetanide can cause hyperglycemia or further elevate blood glucose levels in those who have diabetes. Before administration, monitor the patient's calcium, chloride, potassium, and sodium levels, as bumetanide can cause reduced levels (Jones & Bartlett Learning, 2020).

			takes the drug, it can further reduce serum potassium levels (Jones & Bartlett Learning, 2020).		
Client Teaching needs (2)	Inform the patient that if they accidentally miss a dose of the medication, they need to take it as soon as possible and the next dose, preferably in 24 hours. Also, advise the patient to take this medication with food and not on an empty stomach. If taken on an empty stomach, GI upset or distress can result. Lastly, educate the patient to check their blood pressure routinely throughout	Educate the patient to take this medication at the same time daily to receive or maintain its full effects (Jones & Bartlett Learning, 2020). Educate the patient to take their missed dose immediately. If their next scheduled dose is due soon, educate him to skip his missed dose and only take his next dose to avoid double-dosing (Jones & Bartlett Learning, 2020).	Advise the patient to promptly report signs or symptoms of an allergic reaction, such as dysphagia, pruritus, or rash. In addition, teach the patient to rinse their mouth after using their nebulizer. Doing so will reduce the risk of experiencing irritation of the throat and dryness (Jones & Bartlett Learning, 2020).	Educate the patient to take warfarin at the same time every day, as prescribed. While they are on warfarin therapy, educate the patient to utilize a soft-bristled toothbrush and an electric razor. Educate the patient to avoid activities that impose potential trauma,	Educate the patient to monitor their intake and output closely and watch for headaches and dizziness, indicating an electrolyte imbalance. Educate the patient, if diabetic, to frequently assess their blood sugar levels and contact their primary care provider if high blood glucose levels are persistent (Jones & Bartlett Learning, 2020).

	the day because this medication can cause hypotension (Jones & Bartlett Learning, 2020).			such as contact sports, due to the increased risk of bleeding (Jones & Bartlett Learning, 2020).	

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.).

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient is awake in bed. Patient A&O x4 to person, place, time, and situation. Patient is well-groomed. No acute distress present.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Patient is Caucasian. Skin is warm, tan, and dry throughout. Skin turgor is elastic with immediate recoil. Nails are without clubbing or cyanosis. No appearance of rashes, lesions, bruises, or wounds. AV fistula observed in left antecubital area. Dexcom sensor for blood glucose monitoring located on right upper arm. Braden Scale score of 21. This score indicates the patient is not at risk for developing pressure sores. No drains present. Patient has IV placement on dorsal side of right forearm for fluid resuscitation. IV fluid resuscitation order discontinued before patient assessment. No redness, swelling, or warmness/coolness at IV insertion site.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:**	Head and neck are symmetrical. Trachea is midline without deviation. Thyroid gland is non-palpable, no nodules noted. Bilateral carotid pulses are palpable and strong, +2. No lymphadenopathy in the head or neck is noted.

Teeth:	Hair is of normal texture, quantity, and distribution for age. Bilateral auricles are moist and pink without lesions. Bilateral sclera are white, bilateral cornea are clear, bilateral conjunctiva are pink; no visible redness or drainage from the eyes. Bilateral lids are pink and moist without lesions or discharge noted. PERRLA present bilaterally. EOMs intact bilaterally. Nasal septum is midline. Turbinates are moist and pink bilaterally with no visible bleeding or polyps. Bilateral frontal and maxillary sinuses are non-tender to palpation. Posterior pharynx and tonsils moist and pink without exudate noted. Uvula is midline. Soft palate rises and falls symmetrically. Dentition is good; teeth yellow to white in color. Gums are moist and pink. Tongue is moist and pink. Oral mucosa overall is moist and pink without lesions noted.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	Heart sounds auscultated x5. Clear S1 and S2 is present without murmurs, gallops, or rubs; PMI at fifth intercostal space at midclavicular line. Heart rate 78 bpm at 0745 and 94 bpm at 1130. All extremities are warm, dry, tan, and symmetrical with full strength and range of motion (ROM). Peripheral pulses 2+ in upper and lower extremities bilaterally. Capillary refill occurs in less than 3 seconds to fingers and toes bilaterally. Patient negative for neck vein distention. Upper extremities free of edema bilaterally. 1+ edema present in lower extremities bilaterally.
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:**	No accessory muscle use when breathing. Trachea Midline. No deviations. Patient denies shortness of breath. Respiratory rate 16 bpm upon measurement. Respirations are symmetrical and non-labored bilaterally. Lung sounds clear throughout bilaterally both anteriorly and posteriorly. No wheezes, crackles, or rhonchi noted. Patient is on room air. No ET tubes observed upon assessment.
GASTROINTESTINAL:	Patient's diet at home consists of food and fluid

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:**	of regular consistency. Patient is currently on a low-sodium diet and a fluid restriction of 1.5-2 liters per day due to past medical histories of hypertension, congestive heart failure, chronic kidney disease, and end-stage renal disease. Height: 5'8". Weight: 130 lbs. Upon inspection, no abdominal distension, incisions, scars, drains, or wounds noted. Upon further inspection, no ostomy, nasogastric tube, or feeding/PEG tubes noted. Bowel sounds are normoactive in all four quadrants, ranging from 5 to 20 bowel sounds per minute. Last bowel movement was on 04/05/2022 around 0800 per patient. Upon superficial and deep palpation of all four quadrants, patient denies pain or tenderness. No masses noted upon superficial and deep palpation.
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:**	Patient capable of ambulating to bathroom independently. However, patient urinated once during clinical time into urinal. Urine clear in color and character, 120 mL in total, and free of odor. Patient denies pain upon urination, hesitancy, or urgency to urinate. Patient normally comes to hospital frequently to receive hemodialysis. Patient was not receiving hemodialysis during clinical time. No genital abnormalities noted. No catheter inserted upon assessment. Patient on I & O monitoring.
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☐**	Patient shows no signs of neurovascular deficit. Exhibits active ROM in upper and lower extremities bilaterally. Patient denies the use of supportive devices. Patient exhibits full strength in upper and lower extremities bilaterally. Patient does not require assistance with ADLs. Morse fall score is 0, indicating the patient is not a fall risk. The patient can get up and ambulate independently without the use of assistive devices or equipment. The patient denies the use of any assistive devices or equipment at home.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐**	Patient MAEW. PERRLA present bilaterally. Patient's strength is equal in arms and legs bilaterally. Patient is alert and oriented x4 to

Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	person, place, time, and situation. Patient does not exhibit a neurological deficit. Patient speaks English clearly and fluently. Patient able to vocalize feelings of sharp and dull sensations on the arms and legs bilaterally. No loss of consciousness present.
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):**	Patient does not report any specific coping methods at this time. Patient states that he has completed high school. Patient has no religious affiliations or preferences. Patient lives alone in a two-story home and has a minimal family support system. Closest family support system is the patient's brother that lives in Indiana.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0745	78 bpm	145/84 mmHg	16 bpm	98.5 F (36.9 C): Temporal	95%: Room air
1130	94 bpm	140/70 mmHg	16 bpm	97.4 F (36.3 C): Temporal	96%: Room air

Vital Sign Trends/Correlation:

At 0745, the patient's blood pressure measured 145/84 mmHg. The patient is prescribed amlodipine once daily for high blood pressure. At 0750, the patient received his 0800 scheduled dose of 10 mg of amlodipine to help control his high blood pressure. The patient's heart rate, temperature, oxygen saturation, and respiratory rate read within normal limits. A secondary set of vital signs were collected at 1130. Upon measurement, the patient's blood pressure measured 140/70 mmHg. The patient reported mild pain from a headache. The patient's blood pressure reading is likely high due to the patient's pain. At 1135, the patient received an as-needed dose

of 650 mg of Tylenol to relieve the pain. The patient's heart rate, temperature, respiratory rate, and oxygen saturation read within normal limits. In conclusion, besides the patient's consecutive high blood pressure readings due to pain and a medical history of hypertension, congestive heart failure, chronic kidney disease, and end-stage renal disease, the patient's pulse, temperature, respiratory rate, and oxygen saturation remained stable throughout the clinical time.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0745	0-10 Numeric pain scale; Patient rated pain a 0 out of 10	Patient denied the presence of pain	Patient denied the presence of pain	Patient denied the presence of pain	Patient denied the presence of pain
1130	0-10 Numeric pain scale	Head	Patient rated pain a 3 out of 10	Patient reports that his headache presents with a dull characteristic	acetaminophen (Tylenol) 650 mg Q4hr PRN

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 22 Gauge **Location of IV:** R forearm **Date on IV:** 04/04/2022 **Patency of IV:** Patent, flushes easily **Signs of erythema, drainage, etc.:** No signs of erythema or drainage apparent upon assessment **IV dressing assessment:** IV dressing clean, dry, and intact upon assessment	No fluids were connected and running at the time of assessment. IV Fluids were discontinued on 04/05/2022 at 0600. The patient still had an IV inserted at the time of assessment. The IV was removed soon after the assessment for the preparation of discharge.
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:** **Date of insertion:**	N/A

Patency: **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
2 cups of water (480 mL) = 480 mL total intake during clinical time	120 mL (bedside urinal)

Nursing Care

Summary of Care (2 points)

Overview of care:

Towards the beginning of clinical time, around 0745, I introduced myself to the patient. I then performed my initial vital sign and pain assessment. At this time, the patient denied the presence of pain. However, the patient's blood pressure read 145/84. I then reported this reading to the patient's nurse. At 0750, I assisted the nurse in administering the patient's scheduled 0800 amlodipine to help control his high blood pressure. At 0900, I returned to the patient's room to perform a head-to-toe physical assessment. At 1130, I returned to the patient's room again to perform a secondary vital sign and pain assessment. At this time, the patient reported mild pain from a headache. I then left the patient's room and reported to his nurse about the situation. At 1135, I returned to the patient's room with his nurse to administer an as-needed 650-mg dose of acetaminophen for mild pain to relieve his headache.

Procedures/testing done:

No procedures or testing were scheduled to be performed during the clinical time.

Complaints/Issues:

During the clinical time, the patient complained of mild headache pain at 1130.

Vital signs (stable/unstable):

As mentioned in the "Vital Sign Trends" section, at 0745, the patient's blood pressure measured 145/84 mmHg. The patient is prescribed amlodipine once daily for high blood pressure. At 0750, the patient received his 0800 scheduled dose of 10 mg of amlodipine to help control his high blood pressure. The patient's heart rate, temperature, oxygen saturation, and respiratory rate read within normal limits. A secondary set of vital signs were collected at 1130. Upon measurement, the patient's blood pressure measured 140/70 mmHg. The patient reported mild pain from a headache. The patient's blood pressure reading is likely high due to the patient's pain. At 1135, the patient received an as-needed dose of 650 mg of Tylenol to relieve the pain. The patient's heart rate, temperature, respiratory rate, and oxygen saturation read within normal limits. In conclusion, besides the patient's consecutive high blood pressure readings due to pain and a medical history of hypertension, congestive heart failure, chronic kidney disease, and end-stage renal disease, the patient's pulse, temperature, respiratory rate, and oxygen saturation remained stable throughout the clinical time. The patient's nurse and health care technician were notified of the abnormal blood pressure readings.

Tolerating diet, activity, etc.:

The patient tolerated a low-sodium diet with a fluid restriction of 1.5-2 liters per day during the clinical time. The patient was not receiving physical or occupational therapy during his short hospital stay.

Physician notifications:

During the clinical time, there were no new physician notifications.

Future plans for client:

Future plans for this patient involve being discharged home on 04/05/2022 at 1400 and then returning to his primary care provider on 04/12/2022 for a follow-up appointment.

Discharge Planning (2 points)

Discharge location:

Once the patient is discharged from the hospital, he is arranged to be discharged home, accompanied by his friend.

Home health needs (if applicable):

The patient does not require any home health needs after discharge from the hospital.

Equipment needs (if applicable):

The patient does not require any special equipment at home after discharge from the hospital.

Follow up plan:

Once the patient is discharged from the hospital, he must follow up with his primary health care provider in one week regarding his hospital stay and further cardiovascular, renal, and diabetes maintenance.

Education needs:

This patient requires education regarding proper blood glucose control to prevent future health problems and nonpharmacological practices to control blood pressure. The patient also requires education regarding foods low in sodium to help control blood pressure and what parameters or sodium levels to stay below daily when on a low-sodium diet. For example, for most adults with hypertension or heart failure prescribed a low-sodium diet, the recommended amount of sodium to stay below is 2,000 mg per day.

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. Excess Fluid Volume related to past medical histories of chronic kidney disease, congestive heart failure, and end-stage renal disease as evidenced by bilateral lower-extremity edema and consistent high blood pressure readings (Swearingen & Wright, 2019).	This nursing diagnosis was chosen because the patient exhibited mild edema in his lower extremities bilaterally and consistent high blood pressure readings. These signs and symptoms are due to his past medical histories of chronic kidney disease, congestive heart failure, hypertension, and end-	1. Since the patient is retaining fluid due to improper-functioning kidneys and congestive heart failure, it would be essential to restrict the patient's intake of fluids and sodium to a certain amount to prevent further fluid retention (Swearingen & Wright, 2019). 1. Since the	By discharge, the patient will exhibit a reduction or disappearance in edema, a reduction of high blood pressure readings, and maintain clear lung sounds by adhering to their prescribed diet during their hospital stay.	The patient adhered to fluid and sodium restrictions during the hospital stay, with sodium restrictions being less than 2,000 mg per day and fluid restrictions being less than 1,500 mL per day to prevent worsening of bilateral lower extremity edema and hypertension. A reduction or disappearance in edema and reduction of high blood pressure readings were visualized. Upon

	stage renal disease.	patient is retaining fluid, auscultate the lungs bilaterally, both anteriorly and posteriorly, in all lung fields for crackles or signs of congestion (Swearingen & Wright, 2019).		auscultation of the lungs, the lungs do not present sounds of congestion or crackles.
2. Excess Fluid Volume related to past medical histories of congestive heart failure, chronic kidney disease, and end-stage renal disease as evidenced by bilateral lower-extremity edema and consistent high blood pressure readings (Swearingen & Wright, 2019).	This nursing diagnosis was chosen because the patient exhibited mild edema in his lower extremities bilaterally and consistent high blood pressure readings. These signs and symptoms are due to his past medical histories of chronic kidney disease, congestive heart failure,	1. Frequently assess the patient's intake, output, and weight daily to monitor fluid status (Swearingen & Wright, 2019). 2. Weigh the patient daily at the same time of day with the same scale and amount of clothing to accurately measure the patient's fluid status (Swearingen & Wright, 2019).	The patient will maintain a steady weight or exhibit weight loss and equivalent intake and output measurements by discharge. These findings would indicate that fluid retention is adequately managed and cardiac and renal condition improvement.	The patient maintained a steady or lost weight and a more equivalent intake and output measurement before discharge. These findings indicate that internal fluid retention is being adequately managed and cardiac and renal conditions are improving.

	hypertension, and end-stage renal disease.			
3. Need for Health Teaching related to the unfamiliarity with hypertensive treatment such as medications, nutrition, and blood pressure evaluation as evidenced by a verbal report from the patient that teaching is needed regarding these topics (Swearingen & Wright, 2019).	The patient has a past medical history of hypertension, congestive heart failure, chronic kidney disease, and end-stage renal disease. These conditions contribute to high blood pressure readings. The patient also had two high blood pressure readings upon measurement during the clinical time.	1. Teach the patient how important it is to self-measure his blood pressure when at home at routine intervals and how important it is to strictly adhere to his prescribed drug therapy (Swearingen & Wright, 2019). 2. Educate the patient on how important nutrition is when they have high blood pressure. Teach the patient to adhere to a low-sodium diet with fluid restrictions and look at food labels when grocery	Before discharge, the patient will verbalize that he understands the importance of frequently self-evaluating his blood pressure and the importance of following his prescribed low-sodium, fluid restriction diet. The patient also lists back to the nurse foods to ingest that are low in sodium, calories, and fat. The patient also verbalizes to the nurse that he must avoid TV dinners and processed foods to prevent elevated	The patient verbalizes that he understands the importance of frequently self-measuring his blood pressure at home and adhering to his blood pressure therapy to keep blood pressure under control. The patient verbalizes that he understands the importance of adhering to/following a low-sodium diet with fluid restrictions at home and the importance of looking at food labels when going grocery shopping. The patient verbalizes understanding of looking specifically at

		shopping, specifically the caloric, sodium, and fat/ percentage. Instruct the patient to stay away from frozen TV dinners and processed foods (Swearingen & Wright, 2019).	blood pressure readings due to their high sodium content.	certain foods' caloric count, sodium count, and fat count/ percentage. The patient verbalizes understanding of avoiding TV dinners and processed foods to prevent high blood pressure readings.
4. Need for Health Teaching related to lifestyle modifications and how amlodipine works in the body as evidenced by the patient requesting information about lifestyle modifications to help lower his blood pressure and how amlodipine works to lower his blood pressure (Swearingen & Wright, 2019).	I chose this nursing diagnosis because, during patient care, the patient reported that he was unfamiliar with other ways to manage his blood pressure at home besides taking amlodipine. The patient also verbalized that he was unfamiliar with how amlodipine works in the body to reduce his	1. Assist the patient in identifying and understanding lifestyle modifications outside of medication administration to help control his elevated blood pressure, such as frequent exercising (Swearingen & Wright, 2019). 2. Educate the patient on how amlodipine works in the body to reduce his elevated blood pressure (Swearingen &	Before discharge, the patient will verbalize to the nurse an appropriate exercise regimen for his age via the teach-back method, such as walking for 10 minutes at least three times per day to help reduce his elevated blood pressure readings outside of taking amlodipine at home. Before discharge, the patient will verbalize an	The patient verbalizes to the nurse via the teach-back method an appropriate exercise regimen for his age, such as walking for 10 minutes at least three times per day, to help reduce his elevated blood pressure readings outside of taking amlodipine at home. The patient verbalizes an understanding and teaches back to the nurse in simple terms how

	blood pressure.	Wright, 2019). Explain to the patient that amlodipine is a calcium channel blocker that works by affecting calcium movement into heart cells and blood vessels, relaxing the blood vessels, and lowering blood pressure (Jones & Bartlett Learning, 2020).	understanding of how amlodipine works within the cardiovascular system to reduce his blood pressure.	amlodipine works in the body to reduce his elevated blood pressure.
5. Need for Health Teaching related to dietary modifications as evidenced by a verbal report from the patient requesting information about dietary changes to control his high blood sugar (Swearingen & Wright, 2019).	I chose this nursing diagnosis because the patient has a past medical history of type 2 diabetes mellitus. The patient's blood sugar reading on admission was 178 mg/dL and her blood sugar reading during the clinical time was 148 mg/dL. Considering that this patient has a history of type 2 diabetes	1. Educate the patient to adhere to a low-fat diet and a diet high in whole grains and fiber. Teach the patient what foods are high in fiber and whole grains and what foods to eat that are low in fat. Whole-grain foods include whole-grain cereals, bread, beans, and pasta. Food products high in fiber include beans, broccoli, berries, dried fruits, and whole grains. Foods low in fat include fruits, vegetables, sweet potatoes, beans, and legumes (Swearingen & Wright, 2019).	1. Before discharge, the patient will verbalize an understanding of what types of food and what foods are essential in helping control or reduce elevated blood sugar levels. Before discharge, the patient will verbalize common signs and symptoms seen with hyperglycemia and what contributes to elevated blood sugar levels.	Before being discharged, the patient verbalized an understanding of what types of food and what foods are essential in helping control or reduce elevated blood sugar levels.

	mellitus with consistently high blood sugar readings, he needs to be educated on properly controlling his blood sugar levels at home before discharge.	2. The patient is taught the most common signs and symptoms seen with hyperglycemia, such as the three Ps, and how hyperglycemia occurs. The three Ps are polydipsia, polyphagia, and polyuria. Teach the patient that hyperglycemia happens from stress, poor exercise, and poor nutritional intake (Swearingen & Wright, 2019).		Before being discharged, the patient verbalized the most common signs and symptoms seen with hyperglycemia and what contributes to elevated blood sugar levels.

Other References (APA):

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.).

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Elsevier.

Concept Map (20 Points):

Subjective Data

The patient presented to the OSF Heart of Mary emergency department in Urbana complaining of lightheadedness, weakness, and dizziness that began around 11 a.m. on 4/4.
The patient reported that he was shopping at the IGA in Paxton, and once he reached the check-out line, he began to feel lightheaded, weak, and dizzy. The patient then reported sitting in a chair provided by the employees and fainted soon after for a brief period. The patient woke up soon after fainting and was transported to OSF hospital. Upon arrival at the emergency room and upon questioning, the patient could not determine the amount of time he was passed out. The patient reported not drinking any fluids the morning of the syncope and collapse episode. The patient denied the presence of chest pain, fever, cough, shortness of breath, and chills.
Upon performing two pain assessments throughout the clinical time, the patient only reported mild pain due to a headache at 1130, the second pain assessment. The patient rated his pain a 3 out of 10 and described it as a "dull" feeling.
When performing a head-to-toe assessment during clinical time, the patient denied any present pain.

Objective Data

Abnormal Physical Assessment Findings
1+ edema present in lower extremities bilaterally
Low-sodium diet, fluid restriction of 1.5-2L/day
I & O monitoring
Abnormal Vital Signs (Blood Pressure)
At 0745: 145/84 mmHg
At 1130: 140/70 mmHg
Abnormal labs on 04/04 and 04/05
04/04
RBC: 3.13 10(6)/mcL
Hgb: 9.8 g/dL
Hct: 29%
Glucose: 178 mg/dL
Creatinine: 3.82 mg/dL
INR: 2.7
04/05
RBC: 3.05 10(6)/mcL
Hgb: 9.8 g/dL
Hct: 28.4%
Potassium: 5.2 mg/dL
Glucose: 148 mg/dL
BUN: 49 mg/dL
Creatinine: 5.27 mg/dL
Calcium: 8.2 mg/dL
Phosphate: 5.7 mg/dL
INR: 2.5
Abnormal Diagnostic Imaging (CT of Head/Brain w/o Contrast)
Intracranial atherosclerosis was visualized. Intracranial atherosclerosis could have possibly played a role in the patient's lightheadedness, dizziness, and syncope and collapse episode as plaque in the cranial arteries can decrease the flow of blood to the brain.

Client Information

W.M.A. is an 80 y.o. male with a past medical history of atrial fibrillation, anemia, arthritis, chronic kidney disease, congestive heart failure, type 2 diabetes mellitus, end-stage renal disease, chronic obstructive pulmonary disease, benign prostatic hyperplasia, and hypertension and a chief complaint of lightheadedness, weakness, and dizziness.
Past Surgical Hx: Appendectomy in 1959, Inguinal hernia repair in 1990, and a vascular/cardiac catheterization and angiogram AV shunt dialysis fistula on 11/24/2020.
Patient compliant during clinical time.
Primary Dx: Hypotension
Allergies: Aspirin: Anaphylaxis; Carvedilol (Coreg): Bradycardia/Intolerance; Ibuprofen: Pruritus

Nursing Diagnoses/Outcomes

Excess Fluid Volume related to past medical histories of chronic kidney disease, congestive heart failure, and end-stage renal disease as evidenced by bilateral lower-extremity edema and consistent high blood pressure readings (Swearingen & Wright, 2019).
Goal: By discharge, the patient will exhibit a reduction or disappearance in edema, a reduction of high blood pressure readings, and maintain clear lung sounds by adhering to their prescribed diet during their hospital stay.
Excess Fluid Volume related to past medical histories of congestive heart failure, chronic kidney disease, and end-stage renal disease as evidenced by bilateral lower-extremity edema and consistent high blood pressure readings (Swearingen & Wright, 2019).
Goal: The patient will maintain a steady weight or exhibit weight loss and equivalent intake and output measurements by discharge. These findings would indicate that fluid retention is adequately managed and cardiac and renal condition improvement.
Need for Health Teaching related to the unfamiliarity with hypertensive treatment such as medications, nutrition, and blood pressure evaluation as evidenced by a verbal report from the patient that teaching is needed regarding these topics (Swearingen & Wright, 2019).
Goal: Before discharge, the patient will verbalize that he understands the importance of frequently self-evaluating his blood pressure and the importance of following his prescribed low-sodium, fluid restriction diet. The patient also lists back to the nurse foods to ingest that are low in sodium, calories, and fat. The patient also verbalizes to the nurse that he must avoid TV dinners and processed foods to prevent elevated blood pressure readings due to their high sodium content.
Need for Health Teaching related to lifestyle modifications and how amlodipine works in the body as evidenced by the patient requesting information about lifestyle modifications to help lower his blood pressure and how amlodipine works to lower his blood pressure (Swearingen & Wright, 2019).
Goal: Before discharge, the patient will verbalize to the nurse an appropriate exercise regimen for his age via the teach-back method, such as walking for 10 minutes at least three times per day to help reduce his elevated blood pressure readings outside of taking amlodipine at home. Before discharge, the patient will verbalize an understanding of how amlodipine works within the cardiovascular system to reduce his blood pressure.
Need for Health Teaching related to dietary modifications as evidenced by a verbal report from the patient requesting information about dietary changes to control his high blood sugar (Swearingen & Wright, 2019).
Goal: Before discharge, the patient will verbalize an understanding of what types of food and what foods are essential in helping control or reduce elevated blood sugar levels. Before discharge, the patient will verbalize common signs and symptoms seen with hyperglycemia and what contributes to elevated blood sugar levels.

Nursing Interventions

Since the patient is retaining fluid due to improper-functioning kidneys and congestive heart failure, it would be essential to restrict the patient's intake of fluids and sodium to a certain amount to prevent further fluid retention (Swearingen & Wright, 2019).
Since the patient is retaining fluid, auscultate the lungs bilaterally, both anteriorly and posteriorly, in all lung fields for crackles or signs of congestion (Swearingen & Wright, 2019).
Frequently assess the patient's intake, output, and weight daily to monitor fluid status (Swearingen & Wright, 2019).
Weigh the patient daily at the same time of day with the same scale and amount of clothing to accurately measure the patient's fluid status (Swearingen & Wright 2019).
Teach the patient how important it is to self-measure his blood pressure when at home at routine intervals and how important it is to strictly adhere to his prescribed drug therapy (Swearingen & Wright, 2019, p. 188).
Educate the patient on how important nutrition is when they have high blood pressure. Teach the patient to adhere to a low-sodium diet with fluid restrictions and look at food labels when grocery shopping, specifically the caloric, sodium, and fat/ percentage. Instruct the patient to stay away from frozen TV dinners and processed foods (Swearingen & Wright, 2019, p. 188).
Assist the patient in identifying and understanding lifestyle modifications outside of medication administration to help control his elevated blood pressure, such as frequent exercising (Swearingen & Wright, 2019).
Educate the patient on how amlodipine works in the body to reduce his elevated blood pressure (Swearingen & Wright, 2019). Explain to the patient that amlodipine is a calcium channel blocker that works by affecting calcium movement into heart cells and blood vessels, relaxing the blood vessels, and lowering blood pressure (Jones & Bartlett Learning 2020).
Educate the patient to adhere to a low-fat diet and a diet high in whole grains and fiber. Teach the patient what foods are high in fiber and whole grains and what foods to eat that are low in fat. Whole-grain foods include whole-grain cereals, bread, beans, and pasta. Food products high in fiber include beans, broccoli, berries, dried fruits, and whole grains. Foods low in fat include fruits, vegetables, sweet potatoes, beans, and legumes (Swearingen & Wright, 2019).
The patient is taught the most common signs and symptoms seen with hyperglycemia, such as the three Ps, and how hyperglycemia occurs. The three Ps are polydipsia, polyphagia, and polyuria. Teach the patient that hyperglycemia happens from stress, poor exercise, and poor nutritional intake (Swearingen & Wright, 2019).