

N431 Care Plan #

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N431: Adult Health II

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Demographics (3 points)

Date of Admission 11-5-2023	Client Initials R.B	Age 73 years old	Gender Male
Race/Ethnicity Non-Hispanic	Occupation Retired	Marital Status Married	Allergies Lisinopril
Code Status Full Code	Height 5'7	Weight 248 lbs.	

Medical History (5 Points)

Past Medical History: Diabetes mellitus, hypertension, renal disease.

Past Surgical History: Hernia repair, total knee replacement (left knee).

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 and his wife live together.

Education Level: The patient has had some form of college education.

Admission Assessment

Chief Complaint (2 points): Shortness of breath

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

R.B., a 73-year-old man, arrived at the emergency room complaining of increased blood pressure and dyspnea. He has a history of hypertension, type 2 diabetes, and chronic kidney disease. The patient's cough has been productive, producing frothy sputum. The patient reports that, with this

ailment, he visited convenient care on November 2, 2023. At that time, doxycycline and prednisone were administered to him. The patient states that after taking a dose of doxycycline at 12:20 this morning, he experienced severe shortness of breath, a worsening cough, and some diarrhea. The patient returned to convenient care because he was worried that he might have experienced an allergic response to the doxycycline and noticed that his blood pressure was raised. The patient was directed to Carle Hospital for additional assessment and care. The patient denies having a fever or chills, but their lower extremities edema has worsened over the past few weeks. No abnormal pain, nausea, vomiting, paresthesia, facial weakness, altered mental state, slurred speech, chest pain, or abnormal pain have appeared. He recently started taking Lasix as directed by his primary care physician, according to the patient report. The patient's edema in his lower extremities has not improved.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Hypertension

Secondary Diagnosis (if applicable): Hypoxia

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

One common ailment that affects the body's arteries is high blood pressure. Another name for it is hypertension. The blood's constant excessive force against the arterial walls indicates high blood pressure; the heart must work harder to pump blood (Mayo Clinic, 2023). Millimeters of mercury, or mm Hg, measure blood pressure. A blood pressure measurement of 130/80 millimeters of mercury (mm Hg) or greater is generally considered hypertension. Any blood pressure reading over 180/120 mm Hg is seen as a hypertensive crisis or emergency. If someone has these blood pressure values, get emergency medical attention (Mayo Clinic, 2023). Untreated

hypertension raises the risk of stroke, heart attack, and other major health issues. It is crucial to get blood pressure checked every two years, starting at eighteen; some people require examinations more frequently (Mayo Clinic, 2023). High blood pressure can be prevented and treated with the support of good lifestyle choices, including not smoking, exercising, and eating a balanced diet. Certain individuals require medication to manage hypertension. Despite dangerously high blood pressure readings, the majority of people with high blood pressure do not exhibit any symptoms. Years may pass while they experience high blood pressure without any symptoms (Mayo Clinic, 2023). Although these symptoms are not specific, some people with high blood pressure may experience headaches, shortness of breath, and nosebleeds. Usually, they do not show up until high blood pressure gets to the point where it is dangerous or life-threatening. Before being diagnosed with hypertension symptoms, R.B. arrived at the emergency room complaining of dyspnea. It was good that R.B. arrived at the emergency room instantly because his symptoms could have been worse. He took the time to seek assistance because he knew something felt off. Secondary hypertension is a form of hypertension that results from an underlying medical problem. Compared to primary hypertension, it usually manifests abruptly and results in elevated blood pressure (Mayo Clinic, 2023). Adrenal gland tumors, blood vessel issues that are present from birth, also known as congenital heart defects, certain pain relievers, birth control pills, and other prescription drugs, kidney disease, obstructive sleep apnea, thyroid issues, and some cough and cold medications are among the illnesses and medications that can cause secondary hypertension (Mayo Clinic, 2023). This patient has a past medical history of kidney disease, which could have contributed to his high blood pressure. Age is one of the major risk factors for high blood pressure. As people age, their risk of high blood pressure rises. High blood pressure is common in men up to the age of 64. After age 65, women are more prone to

high blood pressure (Mayo Clinic, 2023). High blood pressure is prevalent among black people. Compared to white people, Black people experience it sooner in life. If they have a parent or sibling who has high blood pressure, their chances of developing high blood pressure are increased (Mayo Clinic, 2023). Being overweight or obese, Changes in the kidneys, blood vessels, and other bodily organs are brought on by being overweight. These modifications often raise blood pressure (Mayo Clinic, 2023). Being obese or overweight also increases the chance of heart disease and the risk factors associated with it, such as high cholesterol; the patient's weight of 248 pounds and overweight status are further contributing factors. inadequate exercise. Gaining weight might result from not exercising. Elevated body weight increases the chance of hypertension. Several other characteristics can increase a person's chance of having hypertension, including the tendency for inactive people to have faster heart rates (Mayo Clinic, 2023). High blood pressure puts too much pressure on artery walls, harming organs and blood vessels. The harm increases with blood pressure and the length of time it remains uncontrolled (Mayo Clinic, 2023). The doctor will check the patient and inquire about any symptoms they may be experiencing and the medical history to identify high blood pressure. After listening to the heart using a stethoscope, the healthcare professional will check the blood pressure with a cuff to determine how high or low it is (Mayo Clinic, 2023). The doctor could advise testing to look for a cause if the patient is diagnosed with high blood pressure. The cause can be identified by an echocardiogram, electrocardiogram (ECG or EKG), laboratory testing, and ambulatory monitoring; the patient underwent a chest x-ray to determine the cause. Modifying the way of life can aid in managing and controlling high blood pressure. The doctor could advise the patient to alter their way of living, such as eating a diet low in salt that is heart-healthy, exercising frequently, staying at a healthy weight, or dropping weight, avoiding alcohol, quitting smoking,

and obtaining seven to nine hours of sleep every day. Occasionally, altering one's lifestyle is insufficient to control high blood pressure. The doctor might suggest using medication to lower the patient's blood pressure if these do not work (Mayo Clinic, 2023). Currently, the patient is using Carvedilol, Losartan, and Amlodipine to assist in controlling their hypertension. If the patient experiences additional symptoms after discharge, he should keep visiting his primary care physician. The patient needs to keep taking their medicine and doing what needs to be done to maintain their blood pressure within a healthy level.

Pathophysiology References (2) (APA):

Mayo Clinic. (2023). *High blood pressure (hypertension)*. Mayo Clinic.

<https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/diagnosis-treatment/drc-20373417>

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	3.64	N/A	The patient has a past medical history of kidney disease (Pagana, 2019).
Hgb	13.0 – 16.5 g/dL	10.9	N/A	A low hemoglobin could mean the body is not getting enough oxygen. The patient also has a past medical diagnosis of kidney disease which could cause low hemoglobin levels (Pagana, 2019).
Hct	38.0 – 50.0 %	32.4	N/A	The patient has a past medical diagnosis of kidney disease (Pagana,

				2019).
Platelets	140 – 440 mcl	206	N/A	
WBC	4.00 – 12.00 mcl	17.54	N/A	It could be a sign of infection or inflammation in the body (Pagana, 2019).
Neutrophils	1.40 – 5.30 mcl	N/A	N/A	
Lymphocytes	19.0 – 49.0 %	N/A	N/A	
Monocytes	3.0 – 13.0 %	N/A	N/A	
Eosinophils	0.0 – 8.0 %	N/A	N/A	
Bands	0 - 5	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-	136 – 145 mmol/L	137	137	
K+	3.5 – 5.1 mmol/L	4.7	4.2	
Cl-	98 – 107 mmol/L	107	105	
CO2	22 – 30 mmol/L	22.0	24.0	
Glucose	74 – 100 mg/dL	263	108	The patient has a past medical diagnosis of diabetes mellitus so that can be an indicator of high glucose levels. 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	54	61	The patient has a past medical history of kidney disease. A high BUN is a sign of reduced kidney filtration or impaired blood flow to the kidneys (Pagana, 2019).
Creatinine	0.70 – 1.30 mg/dL	3.18	3.49	The patient has a past medical history of kidney disease. A high creatinine is a sign of reduced kidney filtration or impaired blood

				flow to the kidneys (Pagana, 2019).
Albumin	3.5 – 5.0 g/dL	N/A	N/A	
Calcium	8.9 – 10.6 mg/dL	8.5	8.1	The patient has a past medical history of kidney disease. Those with renal disease are less able to make active vitamin D, so without active vitamin D they are absorb less calcium from the food they eat (Pagana, 2019).
Mag	1.6 – 2.6 md/dL	N/A	1.6	
Phosphate	3.0 – 4.5 mg/dL	N/A	N/A	
Bilirubin	0.2 – 1.2 mg/dL	0.4	N/A	
Alk Phos	40 – 150 u/L	85	N/A	
AST	5 – 34 u/L	20	N/A	
ALT	0 – 55 u/L	30	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	N/A	N/A	
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 Admission	Today's Value	Reason for Abnormal
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INR	0.8 – 1.1	N/A	N/A	
PT	10.1 – 13.1 sec	N/A	N/A	
PTT	25 – 36 sec	N/A	N/A	
D-Dimer	0 – 622 ng/mL	N/A	N/A	
BNP	0 – 100 pg/mL	614.0	N/A	The patient has a diagnosis of hypertension. BNP goes up when the heart cannot pump the way it should (Pagana, 2019).
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	N/A	N/A	
pH	5.0 – 9.0	N/A	N/A	
Specific Gravity	1.003 – 1.030	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative mg/dL	N/A	N/A	
Ketones	Negative mg/dL	N/A	N/A	
WBC	Negative 0 – 5/hpf	N/A	N/A	
RBC	Negative 0 – 2/ hpf	N/A	N/A	

Leukoesterase	Negative	N/A	N/A	
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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 mm Hg	N/A	N/A	
PaCO2	35 – 45 mm Hg	N/A	N/A	
HCO3	22 – 26 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 < 10,000 Positive > 100,000	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Normal upper	N/A	N/A	

	respiratory tract			
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):

XR chest AP or PA only because patient came in with shortness of breath. The chest x-ray can tell if there is pneumonia, any heart problems, a collapsed lung, broken ribs, emphysema, cancer, and several other conditions. Finding: heart and mediastinum: prominent but stable lung and pleura: increased vascular congestion noted with mild interstitial edema pattern in the basilar lung fields. No other significant abnormalities were noted. The increased vascular congestion can mean there is swelling of the bodily tissues caused by increased vascular blood flow and a localized increase in blood pressure; the patients' primary diagnosis is hypertension so this would explain the high blood pressure.

Diagnostic Test Reference (1) (APA):

Sparks & Taylor, (2020). *Nursing Diagnosis Reference Manual* (11th ed.). Linda Lee Phelps.

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

Home Medications (5 required)

Brand/Generic	Aspirin (Acetylsalicylic acid)	Allopurinol (Zyloprim)	Amlodipine (Norvasc)	Losartan (Cozaar)	Furosemide (Lasix)	
Dose	81 mg	100 mg	5 mg	25 mg	40 mg	
Frequency	Daily	Daily	Daily	Daily	Daily	
Route	Oral	Oral	Oral	Oral	Oral	
Classification	Salicylate, NSAID (Jones & Bartlett Learning, 2021).	Xanthine oxidase inhibitor, antigout (Jones & Bartlett Learning, 2021).	Calcium channel blocker, Antianginal, antihypertension (Jones & Bartlett Learning, 2021).	Antihypertensive (Jones & Bartlett Learning, 2021).	Loop diuretic, antihypertensive (Jones & Bartlett Learning, 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 prostaglandi	Inhibits uric acid production by inhibiting xanthine oxidase, the enzyme that converts Hypoxanthine and xanthine to uric acid. Allopurinol is metabolized to oxyprenolol, which also inhibits xanthine oxidase (Jones &	Binds to dihydropyridine cell membrane receptor sites on myocardial and vascular smooth muscle cells and inhibits influx of extracellular calcium ions across slow calcium channels. This decreases intracellular calcium level. inhibiting smooth muscle cell contractions and relaxing	Blocks binding of angiotensin II to receptor sites in many tissues (Jones & Bartlett Learning, 2021).	Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation. As the body's plasma volume decreased. Aldosterone production increases, which promotes sodium reabsorption and the loss of potassium and hydrogen ions (Jones & Bartlett Learning, 2021).	

	<p>ns. 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 center in the hypothalamus and causes peripheral vasodilation, diaphoresis, and heat loss (Jones & Bartlett Learning, 2021).</p>	<p>Bartlett Learning, 2021).</p>	<p>coronary and vascular smooth muscles, decreasing peripheral vascular resistance, and reducing systolic and diastolic blood pressure. Decreased peripheral vascular resistance also decreases myocardial workload, oxygen demand, and possibly angina (Jones & Bartlett Learning, 2021).</p>			
Reason Client	To relieve	To treat	Hypertension/	To manage	To relieve	

Taking	mild pain	primary gout and hyperuricemia	high blood pressure	hypertension	edema	
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).	Hypersensitivity to allopurinol or its components. May cause severe allergic reaction (Jones & Bartlett Learning, 2021).	Hypersensitivity to amlodipine or its components (Jones & Bartlett Learning, 2021).	Concurrent Alis Kiren therapy, hypersensitivity to losartan or its components (Jones & Bartlett Learning, 2021).	Anuria, hypersensitivity to furosemide or its components (Jones & Bartlett Learning, 2021).	
Side Effects/Adverse Reactions (2)	GI bleeding, prolonged bleeding time (Jones & Bartlett Learning, 2021).	Fever, renal failure (Jones & Bartlett Learning, 2021).	Hypotension, pancreatitis (Jones & Bartlett Learning, 2021).	Hypotension, dizziness (Jones & Bartlett Learning, 2021).	Dizziness, arrhythmias (Jones & Bartlett Learning, 2021).	

<p>Nursing Considerations (2)</p>	<p>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).</p>	<p>Obtain baseline CBC and uric acid level as ordered and review results of renal and liver function tests before and during allopurinol therapy (Jones & Bartlett Learning, 2021).</p>	<p>Use amlodipine cautiously in patients with heart block, heart failure, impaired renal function, hepatic disorder, or severe aortic stenosis. Monitor patient with impaired hepatic function closely because amlodipine is extensively metabolized by the liver, and expect to titrate dosage slowly when administering drug to patients with severe hepatic impairment (Jones & Bartlett Learning, 2021).</p>	<p>Monitor blood pressure and renal function, periodically monitor for serum potassium levels (Jones & Bartlett Learning, 2021).</p>	<p>Be aware that patients who are allergic to sulfonamides may also be allergic to furosemide. Monitor patients closely. Obtain patient's weight before and periodically during furosemide therapy to monitor fluid loss (Jones & Bartlett Learning, 2021).</p>
<p>Key Nursing Assessment(s)/Lab(s) Prior to Administration</p>	<p>Review the patients health history, including any previous gastrointestinal bleeding or ulceration, liver or</p>	<p>Assess heart rate, ECG, and heart sounds. Check for any contraindications to other medication</p>	<p>Assess blood pressure, heart rate, fatigue level (Jones & Bartlett Learning, 2021).</p>	<p>Assess the patient's blood pressure before administration (Jones & Bartlett Learning, 2021).</p>	<p>Assess fluid status, monitor intake and output, daily weight (Jones & Bartlett Learning, 2021).</p>

	kidney disease, or bleeding disorders (Jones & Bartlett Learning, 2021).	(Jones & Bartlett Learning, 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 & Bartlett Learning, 2021).	Advise patients to take allopurinol after meals and to drink enough water (8 to 10 full glasses) to produce a daily urinary output of at least 2 L. Instruct patient to report unusual bleeding or bruising, chills, fever, gout attack, numbness, and tingling (Jones & Bartlett Learning, 2021).	Instruct patient to shake container of oral suspension before measuring dose and to use a calibrated device to measure dosage. Suggest taking amlodipine with food to reduce GI upset (Jones & Bartlett Learning, 2021).	Advise patient to avoid exercising in hot weather and drinking excessive amounts of alcohol and warn patient to tell all prescribers of losartan therapy (Jones & Bartlett Learning, 2021).	Instruct patient to take furosemide at the same time each day to maintain therapeutic effects. Urge her to take it as prescribed, even if she feels well. Caution patient about drinking alcoholic beverages, standing for prolonged periods, and exercising in hot weather because these actions increase the hypotensive effect of furosemide (Jones & Bartlett Learning, 2021).	

Hospital Medications (5 required)

Brand/Generic	Acetaminophen (Tylenol)	Atorvastatin (Lipitor)	Humalog (Lispro)	Carvedilol (Coreg)	Heparin injection
Dose	500 mg	40 mg	1 – 20 units	6.25 mg	5,000 units
Frequency	Every 4 hours/ PRN	Bedtime	Before meals/ At bedtime	Two times daily with meals	Every 8 hours
Route	Oral	Oral	Subcutaneous	Oral	Subcutaneous
Classification	Non-salicylate (Jones & Bartlett Learning, 2021).	HMG-CoA reductase inhibitor, Antihyperlipidemic (Jones & Bartlett Learning, 2021).	Rapid-acting human insulin analog (Jones & Bartlett Learning, 2021).	Nonselective beta blocker and alpha-1 blocker, antihypertensive, heart failure treatment adjunct (Jones & Bartlett Learning, 2021).	Anticoagulant (Jones & Bartlett Learning, 2021).
Mechanism of Action	Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system (Jones & Bartlett Learning,	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	Replacing the insulin that is normally produced by the body and helping move sugar from the blood into other body tissues where it is used for energy (Jones & Bartlett Learning, 2021).	Reduce cardiac output and tachycardia, causes vasodilation, and decreased peripheral vascular resistance, which reduces blood pressure and cardiac workload. When given for at least 4 weeks, carvedilol reduces	Binds with antithrombin III, enhancing antithrombin III's inactivation of the coagulation enzymes thrombin (factor IIa) and factors Xa and XIa. At low doses, heparin inhibits factor Xa and prevents conversion of prothrombin to thrombin. Thrombin is needed for conversion of fibrinogen to

	2021).	Learning, 2021).		plasma renin activity (Jones & Bartlett Learning, 2021).	fibrin; without fibrin, clots can't form. At high doses, heparin inactivates thrombin, preventing fibrin formation and existing clot extension (Jones & Bartlett Learning, 2021).
Reason Client Taking	To relieve mild to moderate pain.	To lower cholesterol and triglyceride levels in the blood	To control hyperglycemia	To control hypertension	to prevent blood clot
Contraindications (2)	Hypersensitivity to acetaminophen or its components, severe hepatic impairment (Jones & Bartlett Learning, 2021).	Active hepatic disease, breastfeeding, hypersensitivity to atorvastatin or its components, pregnancy, unexplained persistent rise in serum transaminase level (Jones & Bartlett Learning, 2021).	Sensitivity to insulin lispro, patient experiencing hypoglycemia (Jones & Bartlett Learning, 2021).	Bronchial asthma or related bronchospastic conditions; cardiogenic shock; decompensated heart failure that require I.V. inotropic (Jones & Bartlett Learning, 2021).	Breastfeeding, infants, neonates, or pregnant women (heparin sodium injection, USP, preserved with benzyl alcohol); history of heparin-induced thrombocytopenia or heparin-induced thrombocytopenia and thrombosis, or thrombocytopenia with pentosan polysulfide (Jones & Bartlett Learning, 2021).
Side Effects/Adverse Reactions (2)	Hypotension, abdominal pain (Jones & Bartlett Learning, 2021).	Arrhythmias, hypoglycemia (Jones & Bartlett Learning, 2021).	Hypoglycemia, weight gain, anxiety (Jones & Bartlett Learning, 2021).	AV block, renal insufficiency (Jones & Bartlett Learning, 2021).	Chest pain, fever (Jones & Bartlett Learning, 2021).
Nursing Considerations (2)	Use cautiously	Know that atorvastatin is	Lispro insulin is given 15	Use carvedilol cautiously in	Avoid injecting any drugs by I.M.

	in patients with hepatic impairment and monitor renal function in patients on long-term therapy (Jones & Bartlett Learning, 2021).	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 with colestipol or cholestyramine for additive antihyperlipidemic effects (Jones & Bartlett Learning, 2021).	minutes before meals; store insulin in a cool place away from direct sunlight. Refrigeration is preferred (Jones & Bartlett Learning, 2021).	patients with peripheral vascular disease because it may aggravate symptoms of arterial insufficiency. In patients with diabetes mellitus, it may mask signs of hypoglycemia, such as tachycardia, and may delay recovery. Monitor patients blood glucose level as ordered, during carvedilol therapy because drug may alter blood glucose level (Jones & Bartlett Learning, 2021).	route during heparin therapy to decrease risk of bleeding and hematoma. Be aware of the important contraindications to this medication (Jones & Bartlett Learning, 2021).
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess the patient's pain level (Jones & Bartlett Learning, 2021).	Obtain baseline cholesterol, triglycerides, and liver function tests. Monitor liver function and creatine kinase level. assess for signs of muscle	Assess the patient's blood glucose regularly (Jones & Bartlett Learning, 2021).	Monitor vital signs, check for any allergic reactions to this medication, assess heart rate (Jones & Bartlett Learning, 2021).	Assess for allergies to anticoagulants, assess for bleeding risk (Jones & Bartlett Learning, 2021).

		weakness or pan. Monitor for EKG (Jones & Bartlett Learning, 2021).			
Client Teaching Needs (2)	Teach the patient that tablets may be crushed or swallowed whole but that extended-release forms should not be broken, chewed, crushed, or split (Jones & Bartlett Learning, 2021).	Take medication at the same time each day to maintain its effects. Instruct patient to contact provider before taking OTC niacin because of increased risk of rhabdomyolysis (Jones & Bartlett Learning, 2021).	Do not inject where the skin is thick, lumpy, tender, or bruised. Inject lispro in the thighs, stomach, upper arms, or buttocks and rotate injection sites (Jones & Bartlett Learning, 2021).	Warn patient that drug may cause dizziness, light-headedness, and orthostatic hypotension; advise patient to take precautions. Tell patient with heart failure to notify prescriber if he gains 5 lb. or more in 2 days or if shortness of breath increasing, which may signal worsening heart failure (Jones & Bartlett Learning, 2021).	Explain that temporary hair loss may occur. Advise patients to wear or carry appropriate medical identification. Explain that heparin cannot be taken orally (Jones & Bartlett Learning, 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 Person, place, situation, time No acute distress, and well groomed
INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: . Braden Score: Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:	Usual for ethnicity Intact, dry Warm Normal elasticity No rashes No bruises No wounds 21
HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:	Normocephalic and atraumatic No abnormal findings present. PERRLA present, EOM intact No polyps, lumps, bumps, or bleeding No dentures .
CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:	Normal heart sounds. S1, S2 present. Capillary refills less than 3 seconds. Intact pulse 3+.
RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character	Mild dyspnea noted. The patient had a little shortness of breath when getting up to use the restroom and ambulate to chair.
GASTROINTESTINAL: Diet at home: Current Diet Height: Weight:	Regular diet Cardiac diet 5'7 248 lb. Active bowel sounds

<p>Auscultation Bowel sounds: Last BM: Palpation: Pain, Mass etc.: Inspection: Distention: Incisions: Scars: Drains: Wounds: Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>Patient had a bowel movement the morning of 11/5/2023 No distention No incision No scaring No drains No wounds</p>
<p>GENITOURINARY: Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Patient gets up one assist to the bedside commode. Was not able to check the output of the patient.</p>
<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Score: 0 Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>Marked pitting edema bilateral in the lower extremities. Pulses 2+ regular and symmetric, bilateral 3+ pitting pedal edema, no calf pain or tenderness. Fall score is 0. Patient does not use any assistive devices, active ROM. Active mobility.</p>
<p>NEUROLOGICAL: MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech:</p>	<p>Patient is alert to person, place, time, and situation. Normal cognition, speech clear. Normal sensory. Alert and answers all question asked of him</p>

Sensory: LOC:	
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):	The patient takes to his wife and family. Patient is a high school graduate but has 2 years of college experience. Patients do not practice religion. The patient lives with his wife.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1300	N/A	137/65	26	97.6	95% nasal canula
1600	N/A	140/66	26	98.0	94 room air

Vital Sign Trends: The patient's vital signs remained within his normal limits.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
Patient stated he was not in pain					
Patient stated he was not in pain					

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV:	Saline lock

Location of IV: Date on IV: Patency of IV: Signs of erythema, drainage, etc.: IV dressing assessment:	Peripheral IV 11/5/2023 18 G anterior; right antecubital. Peripheral IV 11/5/023 18 G anterior; left; lower forearm. IV was patent. No signs of erythema, drainage noted. IV dressing was clean and dry.
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Intake and Output (2 points)

Intake (in mL)	Output (in mL)
240 mL	Patient ambulates to the bedside commode. Was not able to obtain output.

Nursing Care

Summary of Care (2 points)

Overview of care: The patient was in a good mood and was very talkative. I gave him his medication at 2:15 p.m. and did a head-to-toe assessment. I ambulated the patient to the chair. The patient's wife came in and he wanted to be with her, so the nursing student and nurse left the room to give them some privacy.

Procedures/testing done: N/A

Complaints/Issues: N/A

Vital signs (stable/unstable): The patient vital signs remained stable.

Tolerating diet, activity, etc.: The patient tolerates his cardiac diet well and has no problems with eating or drinking.

Physician notifications: None

Future plans for client: The patient will continue to take his medication as prescribed and will call the provider if he has any signs and symptoms of hypertension. The patient will go to the emergency department if he is feeling short or breath.

Discharge Planning (2 points)

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

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

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 to take the medication as prescribed by the provider.

Nursing Diagnosis (15 points)

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

Nursing Diagnosis <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation <ul style="list-style-type: none"> • How did the client/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan
Risk for activity intolerance related to generalized weakness as evidence by patients’ chief complaint of shortness of breath (Phelps, 2020).	This nursing diagnosis was chosen because the patient came in with shortness of breath.	1. Monitor vital signs throughout activity (Phelps, 2020). 2. Provide supplemental oxygen therapy as needed (Phelps, 2020).	1. The patients vital signs will remain in normal range (Phelps, 2020).	The patient verbalized their understanding of the need to gradually increase activity level and how to accomplish this (Phelps, 2020).

<p>Excess fluid volume related to patients BNP being elevated at 614.0 pg/mL as evidence by bilateral lower extremities having 3+ pitting edema (Phelps, 2020).</p>	<p>This nursing diagnosis was chosen due the patient has 3+ pitting edema in both legs.</p>	<ol style="list-style-type: none"> 1. The patient is to be weighed daily (Phelps, 2020). 2. Restrict fluids as ordered (Phelps, 2020). 	<ol style="list-style-type: none"> 1. The patient will show a reduction in edema (Phelps, 2020). 	<p>The patient understands the nursing diagnosis given to him and the step to take to help in reduction of edema (Phelps, 2020).</p>
<p>Sedentary lifestyle related to lack of interest in physical activity as evidenced by patient weighing 248 lbs., which is considered obese (Phelps, 2020).</p>	<p>This nursing diagnosis was chosen because the patient lacks a physical lifestyle, and a sedentary lifestyle can lead to more comorbidities.</p>	<ol style="list-style-type: none"> 1. Help patient set a reasonable activity plan to aid in weight loss e.g, walker to mailbox daily or 5000 daily step goal (Phelps, 2020). 2. Educate the patient on how exercising regularly will decrease stress on the heart (Phelps, 2020). 	<ol style="list-style-type: none"> 1. The patient will participate in physical activity within their capability at least three times per week (Phelps, 2020). 	<p>The patient verbalizes understanding of physical activity that is required of him to maintain a healthier weight (Phelps, 2020).</p>
<p>Decreased cardiac output related to increased exertion in workload as evidence by patient having trouble breathing (dyspnea) (Phelps, 2020).</p>	<p>This nursing diagnosis was chosen because the patient was assessed and was experiencing dyspnea.</p>	<ol style="list-style-type: none"> 1. Administer beta-blockers or calcium-channel blockers (Phelps, 2020). 2. Apply supplemental oxygen to reduce sympathetic nervous system stimulation, which reduces cardiac workload (Phelps, 2020). 	<ol style="list-style-type: none"> 1. Patient will demonstrate a reduction in cardiac workload (Phelps, 2020). 	<p>The patient understands the steps to decrease cardiac output and is okay with the nursing diagnosis (Phelps, 2020).</p>

Other References (APA):

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

Concept Map (20 Points):

Subjective Data

The patient was in a good mood. He was playful and happy. The patient stated he was ready to go home but that he appreciates all the help he's been getting.

Objective Data

The patient's blood pressure was 145/66
 The patient showed no signs of pain.
 The patient ate and tolerated his cardiac diet well.
 The patient had a little shortness of breath when ambulating to the chair and up to the bedside commode.

Client Information

Date of admission: 11-5-2023
 Client initials: R.B
 Age: 73 years old
 Gender: Male
 Race/Ethnicity: Non-Hispanic
 Occupation: Retired
 Marital Status: Married
 Allergies: Lisinopril
 Code Status: Full Code
 Height: 5'7
 Weight: 248 lb.

Nursing Diagnosis/Outcomes

1. Risk for activity intolerance related to generalized weakness as evidence by patients' chief complaint of shortness of breath.
 - The patients' vital signs will remain in normal range.
2. Excess fluid volume related to patients BNP being elevated at 614.0 pg/mL as evidence by bilateral lower extremities having 3+ pitting edema.
 - The patient will show a reduction in edema.
3. Sedentary lifestyle related to lack of interest in physical activity as evidenced by patient weighing 248 lbs., which is considered obese.
 - The patient will participate in physical activity within their capability at least three times per week.
4. Decreased cardiac output related to increased exertion in workload as evidence by patient having trouble breathing (dyspnea).
 - Patient will demonstrate a reduction in cardiac workload.

Nursing Interventions

1. Monitor vital signs throughout activity.
2. Provide supplemental oxygen therapy as needed.
3. The patient is to be weighed daily
4. Restrict fluids as ordered
5. Help patient set a reasonable activity plan to aid in weight loss e.g, walker to mailbox daily or 5000 daily step goal.
6. Educate the patient on how exercising regularly will decrease stress on the heart.
9. Administer beta-blockers or calcium-channel blockers.
8. Apply supplemental oxygen to reduce sympathetic nervous system stimulation, which reduces cardiac workload.



