N431 Care Plan #1

Lakeview College of Nursing

Shelby Myers

Demographics (3 points)

Date of Admission 03/03/2023	**Client Initials** C. G.	**Age** 65 years	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** No know allergies
Code Status Full code	**Height** 5’2”	**Weight** 54.9 kg	

Medical History (5 Points)

Past Medical History:

- Advanced chronic obstructive pulmonary disorder
- Bilateral carotid artery disease
- Bradycardia
- Cardiomyopathy
- Left carotid occlusion.
- Chest pain
- Chronic obstructive pulmonary disorder (COPD)
- Chronic serous otitis media, left
- Coronary artery disease
- Cerebrovascular accident resulting in disturbance of vision
- Diastolic dysfunction
- Dyspnea on exertion
- Frequent premature ventricular contractions
- Gastrointestinal bleed
- Congestive heart failure (CHF)
- Hyperlipidemia

- Hypertensive cardiovascular disease
- Mitral regurgitation
- Mitral valve prolapse
- Non-sustained ventricular tachycardia
- Paroxysmal atrial fibrillation
- Psoriatic arthritis
- Pulmonary nodule
- Left atrial appendage litigation
- Supraventricular tachycardia
- Thrombosis of left carotid artery

Past Surgical History:

- Cardiac ablation (11/01/2021)
- Cardiac catheterization (date unknown)
- Hysterectomy (date unknown)
- Mitral valve re-replacement (date unknown)
- Repair of tricuspid atresia (date unknown)

Family History:

- Paternal: cardiovascular disease, heart attack, and heart disease
- Maternal: cardiovascular disease, dental disease, heart disease, hypertension, and stroke
- Maternal grandmother: breast cancer
- Sister: breast cancer

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

- Tobacco: former smoker of 15 years smoking about half of a pack of cigarettes per day

- Alcohol: patient denies use
- Drugs: patient denies use

Assistive Devices: N/A

Living Situation: The patient lives at home with her husband. The husband works part-time and the patient stays home and occasionally watches her grandchildren.

Education Level: The patient graduated from high school and completed some college coursework, but never graduated from college.

Admission Assessment

Chief Complaint (2 points): Shortness of breath and radiating pain

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

The patient presented to the emergency department on 03/03/2023 with complaints of shortness and chest pain. The symptoms began at about 4am when her husband was getting ready for work. The patient stated that the pain began at her feet and quickly radiated up to her chest and she felt like she could not breathe. She called out to her husband to bring her rescue inhaler but then told him to call emergency services instead. The patient described the pain as a constant, sharp feeling of tightness in her chest. She does not recall any aggravating factors by stating she was "sleeping peacefully" prior to the symptoms. The patient did not use her rescue inhaler or administer any treatments before arriving to the emergency room. She rated her pain as a 7 on a numeric scale from 0 to 10.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): CHF exacerbation

Secondary Diagnosis (if applicable): COPD exacerbation

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

Congestive heart failure is a condition that causes decreased cardiac output and other symptomatic conditions. This condition happens secondary to another cardiac abnormality or cardiac dysfunction. Some conditions that can cause congestive heart failure are myocardial infarction, valve stenosis, and regurgitation (Schwinger, 2021). Identifying the underlying cause of this condition is essential to determine the best treatment method. There are two categories of congestive heart failure: left-sided heart failure and right-sided heart failure, depending on which ventricle is more affected. Left-sided heart failure is associated with the backup of fluid into the lungs due to the association of manifestations to the lungs specifically (Hinkle, Cheever & Overbaugh, 2022). The right-sided heart failure is associated with the backup of fluid into the rest of the body, once again, due to its association with the manifestations. Decreased blood flow caused by the underlying cause triggers baroreceptors in the aortic and carotid bodies, which causes the sympathetic nervous system to release epinephrine and norepinephrine ((Hinkle, Cheever & Overbaugh, 2022). This release by the sympathetic nervous system also affects the angiotensin, aldosterone, and other neurohormones, increasing the preload and afterload of the heart, which causes fluid buildup in these patients. When the cardiac chamber is overdistended, the atrial natriuretic peptide (ANP) and B-type natriuretic peptide (BNP) are released, which promote vasodilation and diuresis.

The clinical manifestations of congestive heart failure are dyspnea, fatigue, and fluid retention (Hinkle, Cheever & Overbaugh, 2022). In left-sided heart failure, the fluid causes pulmonary congestion, which leads to dyspnea, crackles, cough, and low oxygen saturation. Based on these symptoms, it seems this patient has left-sided heart failure because most of her symptoms were primarily associated with her lungs. The diagnostic testing that helps to confirm

a heart failure diagnosis are ejection fraction, echocardiogram, chest x-ray, and a 12-lead echocardiogram. Labs that can also indicate heart failure are serum electrolytes, BUN, creatinine, liver function tests, thyroid stimulating hormone, complete blood count, BNP, and routine urinalysis (Hinkle, Cheever & Overbaugh, 2022). The BNP is specifically important in diagnosing heart failure and determining its severity. This patient had an electrocardiogram and a chest x-ray performed during this hospitalization. The chest x-ray showed pulmonary edema and mild pleural effusions, complications associated with left-sided congestive heart failure. The electrocardiogram showed a new formation of PVCs and other minor abnormal findings.

Treatment for congestive heart failure uses a combination of medications and lifestyle changes. Treatment aims to improve cardiac function and reduce symptoms if possible (Hinkle, Cheever & Overbaugh, 2022). Medications can include a diuretic, angiotensin blocker, and beta-blocker. This patient is on metoprolol and furosemide to manage her heart failure. The lifestyle changes include education on the condition, restricting sodium intake, avoiding smoking, monitoring fluid intake, regular exercise, and weight reduction if necessary. This patient was already adhering to a low sodium diet at home and is educated on her condition since it is not new to her at this admission.

Pathophysiology References (2) (APA):

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer.

Schwinger, R. H. (2021). Pathophysiology of heart failure. *Cardiovascular diagnosis and therapy*, *11*(1), 263.

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 (03/03)	Today's Value	Reason for Abnormal Value
RBC	3.8 – 5.41 x10^6/mcL (Sarah Bush Lincoln)	3.32 x10^6/mcL	N/A***	The low red bloods cells can be a result of the chronic use of aspirin and Eliquis to thin the blood (Hinkle, Cheever & Overbaugh, 2022)
Hgb	11.3 – 15.2 g/dL (Sarah Bush Lincoln)	11.4 g/dL	N/A***	N/A
Hct	33.2 – 45.3% (Sarah Bush Lincoln)	34.2%	N/A***	N/A
Platelets	149 – 393 K/mcL (Sarah Bush Lincoln)	192 K/mcL	N/A***	N/A
WBC	4 – 11.7 K/mcL (Sarah Bush Lincoln)	10 K/mcL	N/A***	N/A
Neutrophils	45.3 – 79% (Sarah Bush Lincoln)	61.8%	N/A***	N/A
Lymphocytes	11.8 – 45.9% (Sarah Bush Lincoln)	28.1%	N/A***	N/A
Monocytes	4.4 – 12.0% (Sarah Bush Lincoln)	7.8%	N/A***	N/A
Eosinophils	0 – 6.3% (Sarah Bush Lincoln)	1.4%	N/A***	N/A
Bands		N/A	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 (03/03)	Today's Value	Reason For Abnormal

Na-	136 – 145 mmol/L (Sarah Bush Lincoln)	137 mmol/L	N/A***	N/A
K+	3.5 – 5.1 mmol/L (Sarah Bush Lincoln)	4.9 mmol/L	N/A***	N/A
Cl-	98 – 107 mmol/L (Sarah Bush Lincoln)	104 mmol/L	N/A***	N/A
CO2	21 – 31 mmol/L (Sarah Bush Lincoln)	29 mmol/L	N/A***	N/A
Glucose	74 – 109 mg/dL (Sarah Bush Lincoln)	270 mg/dL	N/A***	The patient does not have diabetes, therefore the elevated glucose may be a response to the acute exacerbation (Hinkle, Cheever & Overbaugh, 2022).
BUN	7 – 25 mg/dL (Sarah Bush Lincoln)	13 mg/dL	N/A***	N/A
Creatinine	0.60 – 1.20 mg/dL (Sarah Bush Lincoln)	0.71 mg/dL	N/A***	N/A
Albumin	3.5 – 5.2 g/dL (Sarah Bush Lincoln)	3.9 g/dL	N/A***	N/A
Calcium	8.6 – 10.3 mg/dL (Sarah Bush Lincoln)	9.0 mg/dL	N/A***	N/A
Mag	1.6 – 2.4 mg/dL (Sarah Bush Lincoln)	2.1 mg/dL	N/A***	N/A
Phosphate	2.8 – 4.5 mg/dL (Sarah Bush Lincoln)	N/A	N/A***	N/A
Bilirubin	0.3 – 1.0	0.6 mg/dL	N/A***	N/A

	mg/dL (Sarah Bush Lincoln)			
Alk Phos	34 – 104 units/L (Sarah Bush Lincoln)	45 units/L	N/A***	N/A
AST	13 – 39 units/L (Sarah Bush Lincoln)	29 units/L	N/A***	N/A
ALT	7 – 52 units/L (Sarah Bush Lincoln)	34 units/L	N/A***	N/A
Amylase	29 – 103 units/L (Capriotti & Frizzle, 2020)	N/A	N/A***	N/A
Lipase	11 – 82 units/L (Capriotti & Frizzle, 2020)	N/A	N/A***	N/A
Lactic Acid	0.5 – 2.0 mmol/L (Sarah Bush Lincoln)	2.3 mmol/L	N/A***	Lactic acid is elevated due to chronic hypoxia resulting from CHF and COPD (Hinkle, Cheever & Overbaugh, 2022).
Troponin	0 – 0.030 ng/mL (Sarah Bush Lincoln)	0.029 ng/mL	N/A***	N/A
CK-MB	3 – 5% (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
Total CK	5 – 25 IU/L (Caprioti & Frizzell, 2020)	N/A	N/A***	N/A

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

Lab Test	Normal Range	Value on Admission (03/03)	Today's Value	Reason for Abnormal
INR	0.86 – 1.14 seconds (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
PT	11.9 – 15.0 seconds (Capriotti & Frizzell, 2020)	NA	N/A***	N/A
PTT	22.6 – 35.3 seconds (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
D-Dimer	0 – 0.62 (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
BNP	0 - 100 (Sarah Bush Lincoln)	791	N/A***	The BNP value is elevated due to the patient's diagnosis of CHF and the acute exacerbation that brought her to the hospital (Hinkle, Cheever & Overbaugh, 2022).
HDL	23 – 93 mg/dL (Sarah Bush Lincoln)	N/A	N/A***	N/A
LDL	<100 mg/dL (Sarah Bush Lincoln)	N/A	N/A***	N/A
Cholesterol	<199 mg/dL (Sarah Bush Lincoln)	N/A	N/A***	N/A
Triglycerides	0 – 149 mg/dL (Sarah Bush Lincoln)	N/A	N/A***	N/A
Hgb A1c	<6.4%	N/A	N/A***	N/A

	(Sarah Bush Lincoln)			
TSH	0.45 – 5.33 (Sarah Bush Lincoln)	N/A	N/A***	N/A

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

Lab Test	**Normal Range**	**Value on Admission (03/03)**	**Today's Value**	**Reason for Abnormal**
Color & Clarity	Yellow and clear (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
pH	5.0 – 9.0 (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
Specific Gravity	1.003 – 1.013 (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
Glucose	Negative (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
Protein	Negative or trace (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
Ketones	Negative (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
WBC	0.0 – 0.5 (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A
RBC	0.0 – 0.3 (Capriotti &	N/A	N/A***	N/A

	Frizzell, 2020)			
Leukoesterase	Negative (Capriotti & Frizzell, 2020)	N/A	N/A***	N/A

Arterial Blood Gas Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.
*The patient only had venous blood gases, so the following values are venous blood gases.

Test	Normal Range	Value on Admission (03/03)	Today's Value	Explanation of Findings
pH	7.31 – 7.41 (Sarah Bush Lincoln)	7.33	N/A***	N/A
PaO2	40 – 50 mmHg (Sarah Bush Lincoln)	30 mmHg	N/A***	The low PaO2 values is indicative of decreased cardiac output from the patient's CHF (Hinkle, Cheever & Overbaugh, 2022).
PaCO2	40 – 50 mmHg (Sarah Bush Lincoln)	61.3 mmHg	N/A***	The high CO2 is indicative of the increased carbon dioxide consumption associated with hyperventilation (Hinkle, Cheever & Overbaugh, 2022).
HCO3	22 – 26 mmol/L (Sarah Bush Lincoln)	27.5 mmol/L	N/A***	The high bicarbonate level is a result of the body trying to compensate for the elevated CO2 and trying to balance the pH (Hinkle, Cheever & Overbaugh, 2022).
SaO2	60 – 75% (Sarah Bush Lincoln)	50.2%	N/A***	The low SaO2 value is indicative of the tissues in the body not receiving enough oxygen from the blood which is a result of the COPD, CHF, and hyperventilation (Hinkle, Cheever & Overbaugh, 2022).

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 (03/03)	Today's Value	Explanation of Findings
Urine Culture	Negative (Capriotti & Frizzell, 2020)	N/A	N/A	N/A
Blood Culture	Negative (Capriotti & Frizzell, 2020)	N/A	N/A	N/A
Sputum Culture	Negative (Capriotti & Frizzell, 2020)	N/A	N/A	N/A
Stool Culture	Negative (Capriotti & Frizzell, 2020)	N/A	N/A	N/A

*** = Lab values for clinical day (03/06/2023) had not resulted by the end of clinical.

Lab Correlations Reference (1) (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

The patient had two diagnostic tests performed during her current admission and those were a single-view chest x-ray and an electrocardiogram. The single-view chest x-ray was ordered due to the patient's complaint of shortness of breath. The x-ray machine creates images by sending a high-voltage electrical current through a tungsten filter in a vacuum tube through a patient in a specified location (Pagana, Pagana & Pagana, 2021). These rays penetrate tissues,

bones, and other objects differently which produces the shade difference that creates a picture of the placement, size, and gross abnormalities within the body. This patient's x-ray was performed on 03/03/2023 and revealed a mildly enlarged heart size, trace bilateral pleural effusions, and diffuse mild interstitial thickening which are indicative of cardiomegaly and mild pulmonary edema. This patient also had an electrocardiogram performed on 03/03/2023 for the same reason as the x-ray which was the patient's complaint of shortness of breath. An electrocardiogram (EKG) shows the electrical impulses of the heart through electrodes that are placed in specific areas on the skin of the patient's chest (Pagana, Pagana & Pagana, 2021). This patient's EKG showed sinus rhythm with occasional premature ventricular complexes, a rightward axis, an old anteroseptal infarct, and ST and T wave abnormalities.

Diagnostic Test Correlation (5 points):

The single-view chest x-ray and the electrocardiogram both contribute to the patient's chief complaint and current diagnosis. The single-view chest x-ray that showed cardiomegaly and mild pulmonary edema are indicative of damage done to the heart and lungs from her COPD and CHF conditions. The x-ray also showed mild bilateral pleural effusions which means there is a fluid build-up in the lung cavity which is a result of left-sided heart failure. The echocardiogram showed new PVCs which can also damage the heart and could have exacerbated the symptoms, especially since these PVCs were not present on an ECG that the client had performed on 02/25/2023.

Diagnostic Test Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2021). *Mosby's Manual of Diagnostic and*

Laboratory Tests-E-Book. Elsevier Health Sciences.

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

Home Medications (5 required)

Brand/Generic	Aspirin/ aspirin (Jones, 2021)	Eliquis/ apixaban (Jones, 2021)	Ventolin HFA/ albuterol (Jones, 2021)	Toprol-XL/ metoprolol (Jones, 2021)	Vistaril/ hydroxyzine (Jones, 2021)
Dose	81 mg	5 mg	1.25 mg/ 3 mL	50 mg	25 mg
Frequency	Daily	Daily	TID PRN	Daily	TID PRN
Route	PO	PO	Inhaler	PO	PO
Classification	Salicylate & NSAID (Jones, 2021)	Factor Xa inhibitor & Anticoagulant (Jones, 2021)	Adrenergic & Bronchodilator (Jones, 2021)	Beta1-adrenergic blocker & Antihypertensive (Jones, 2021)	Piperazine derivative & Sedative-hypnotic (Jones, 2021)
Mechanism of Action	Inhibits platelet aggregation by interfering with production of thromboxane A2 (Jones, 2021)	Inhibits factor Xa which decreases thrombin generation (Jones, 2021)	Attaches to beta2 receptors on bronchial cells which stimulates adenylate cyclase to convert ATP to cAMP (Jones, 2021)	Inhibits stimulation of beta1-receptor sites resulting in decreased cardiac contractility (Jones, 2021)	Competes with histamine for the histamine1 receptor sites and suppresses the histaminic activity (Jones, 2021)
Reason Client Taking	Client is taking in conjunction with Eliquis to thin blood with its anti-platelet properties	Client is taking in conjunction with aspirin to thin the blood	Client is taking as a short acting bronchodilator for her COPD exacerbations	Client is taking to treat her hypertension (Jones, 2021)	Client is taking for calming purposes to treat her anxiety (Jones, 2021)

Contraindications (2)	Active bleeding & hypersensitivity to aspirin (Jones, 2021)	Active bleeding & severe hypersensitivity to apixaban (Jones, 2021)	Hypersensitivity to albuterol & severe cardiac disorders (Jones, 2021)	Heart block greater than first degree & sinus bradycardia (Jones, 2021)	Prolonged QT interval & hypersensitivity to hydroxyzine (Jones, 2021)
Side Effects/Adverse Reactions (2)	Bleeding & Reye's syndrome (Jones, 2021)	Hemorrhage & hypotension (Jones, 2021)	Guillian-Barre syndrome & myocardial ischemia (Jones, 2021)	Arrythmias & thrombocytopenia (Jones, 2021)	Torsades de pointes & seizures (Jones, 2021)
Nursing Considerations (2)	Place client on bleeding precautions while taking & monitor for tinnitus as it is a sign of toxicity (Jones, 2021)	Should not be given to client with sever hepatic dysfunction & must discontinue 48 hours prior to procedures and surgery (Jones, 2021)	Monitor serum potassium & use cautiously in patients with hypertension (Jones, 2021)	Use cautiously in patients with CHF & assess ECG for risk of AC block (Jones, 2021)	Use cautiously in patients with heart disease & do not give hydroxyzine subcutaneous or IV (Jones, 2021)
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Clotting factors & CBC (Jones, 2021)	Clotting factors & CBC (Jones, 2021)	Vital signs & respiratory assessment (Jones, 2021)	Blood pressure & apical heart rate for 1 minute (Jones, 2021)	Check ECG for QT interval length & neurological assessment (Jones, 2021)
Client Teaching Needs (2)	Do not take concurrent with ibuprofen or naproxen & take with food or after meals (Jones,	Report any unusual bleeding to provider & importance of taking exactly as prescribed (Jones,	How to use inhaler & proper inhaler cleaning techniques (Jones, 2021)	How to assess heart rate at home & do not stop drug abruptly (Jones, 2021)	Avoid alcohol while taking & do not drive until the drug affects are known (Jones,

	2021)	2021)			2021)

Hospital Medications (5 required)

Brand/Generic	Lasix/ furosemide (Jones, 2021)	Oracea/ doxycycline (Jones, 2021)	Pulmicort Flexhaler/ budesonide (Jones, 2021)	Yulperi/ revefenacin (Jones, 2021)	Oxeze Turbuhaler/ formoterol (Jones, 2021)
Dose	40 mg	100 mg	0.5 mg/2 mL	175 mcg/3 mL	20 mcg/2 mL
Frequency	Daily	Daily	BID	Daily	BID
Route	IV push	PO	Inhaler	Nebulizer	Inhaler
Classification	Loop diuretic & Antihypertensive, diuretic (Jones, 2021)	Tetracycline & Antibiotic (Jones, 2021)	Corticosteroid & Antiasthmatic (Jones, 2021)	Anticholinergic & Bronchodilator (Jones, 2021)	Selective beta2-adrenergi agonist & Bronchodilator (Jones, 2021)
Mechanism of Action	Inhibits sodium and water reabsorption into the loop of Henle and therefore increases urine formation (Jones, 2021)	Exerts a bacteriostatic effect against a wide variety of gram+ and gram- organisms (Jones, 2021)	Inhibits inflammatory cells and mediators therefore decreasing inflammation (Jones, 2021)	Inhibits muscarinic receptor M3 to smooth muscles of the airway to bronchodilator (Jones, 2021)	Selectively attaches to beta2-receptors on bronchial membranes which increases cAMP levels and relaxes smooth muscle cells (Jones, 2021)
Reason Client Taking	Client is taking to remove excess fluid that results from the CHF	Client is taking for the fluid in her lungs to prevent pneumonia	Client is taking to reduce inflammation in the lungs from her COPD	Client is taking for maintenance bronchodilate to open airways for her COPD	Client is taking as a bronchodilator to open airways from her COPD

Contraindications (2)	Anuria & hypersensitivity to furosemide (Jones, 2021)	Hypersensitivity to doxycycline & hypersensitivity to tetracyclines (Jones, 2021)	Recent septal ulcers & status asthmaticus (Jones, 2021)	Hypersensitivity to revefenacin & ?? (Jones, 2021)	Patients who have asthma & hypersensitivity to formoterol (Jones, 2021)
Side Effects/Adverse Reactions (2)	Thromboembolism & hepatocellular insufficiency (Jones, 2021)	Pericarditis & intracranial hypertension (Jones, 2021)	Adrenal insufficiency & rectal bleeding (Jones, 2021)	Paradoxical bronchospasm & hypersensitivity reactions (Jones, 2021)	Laryngeal spasm & paradoxical bronchospasm (Jones, 2021)
Nursing Considerations (2)	Obtain a patients weight before and after treatment &	Monitor for stool changes that could indicate C. Diff & monitor for signs of intracranial hypertension (Jones, 2021)	Use cautiously in patients with ocular herpes simplex & monitor patients with hypertension (Jones, 2021)	Do not use for acute treatment & use cautiously in patients with urinary retention (Jones, 2021)	Use cautiously in patients with cardiovascular disease & watch closely for paradoxical bronchospasm (Jones, 2021)
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Serum potassium & daily weight (Jones, 2021)	Skin assessment & liver function tests (Jones, 2021)	Ask about lactose allergy & respiratory assessment (Jones, 2021)	Respiratory assessment & oxygen saturation (Jones, 2021)	Respiratory assessment & vital signs (Jones, 2021)
Client Teaching Needs (2)	Take medication at same time each day & change position slowly to avoid orthostatic hypotension	Avoid antacids while taking this drug & educate that urine may turn dark yellow or brown (Jones,	Proper oral care after use & do not stop abruptly (Jones, 2021)	Inform patient that this is not an acute med, but maintenance & report any blurred vision (Jones,	Proper use of inhaled solution & notify provider immediately if experiencing chest pain (Jones,

	(Jones, 2021)	2021)		2021)	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:**	The patient is alert and oriented x4 to person, place, time, and situation. There were no signs of distress, and the patient was overall well-groomed and relaxed upon assessment.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	The skin color was pale, but appropriate for ethnicity. The patient's skin was dry, intact, and warm to the touch. Her skin turgor was loose due to the loss of excess fluid but there were no rashes, bruises, or wounds present. The patient's Braden score is a low risk at a score of 21. There are no drains present.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	The patient's head was normocephalic and symmetrical of the skull and face. The trachea was midline with no signs of deviation. Lymph nodes and thyroid were non-tender upon palpation with no signs of abnormalities. The eyes were free from redness, drainage, or other abnormalities upon gross examination. The pupils were equal, round, and reactive to light. All extraocular movements were intact, but the patient did state she is legally blind in her left eye after a transient ischemic attack several years ago. Her ears were clear and free from drainage upon gross examination. The nose was free from drainage, epistaxis, and the septum was midline without deviation. The patient's mucous membranes were pink and moist. The patient also has a removable top set of dentures, but bottom

	teeth were well-distributed and free from abnormalities.
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:**	The patient's heart sounds were auscultated in all locations. S1 and S2 were identified with a normal sinus rhythm that was bradycardic at a rate of 58 beats per minute. Peripheral pulses were 2+ in all extremities and capillary refill was less than 3 seconds. There was no neck vein distention or edema present upon examination.
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	The patient's lung sounds were auscultated on both anterior and posterior sides. The lung sounds were clear bilaterally, but slightly diminished in the lower lobes. Her respirations were regular and unlabored with no accessory muscle use present at a rate of 18 breaths per minute.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	The patient stated that she "tries to follow a cardiac diet at home as well". During her current admission she is also on a cardiac diet. The patient is 5'2" and weighs 54.9 kg. There were no distention, incisions, scars, drains, or wounds present upon inspection. Her bowel sounds were auscultated and were active in all four quadrants. The patient reported no pain or tenderness during light and deep palpation, and no abnormalities were noted. The patient does not have an ostomy, nasogastric tube, or feeding tube/PEG tube.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐**	The patient voided 200 mL of clear but amber colored liquid with a very strong odor. She reported no pain upon urination, and does not receive dialysis treatment. The patient's genitals were inspected and no abnormalities or changes in urinary habits were noted.

Inspection of genitals: **Catheter: Y ☐ N ☐** **Type:** **Size:**	
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☐**	The patient is alert and oriented x4 to person, place, time, and situation. Her active and passive range of motion were intact. She does not use any assistive devices to move about the room. The patient's strength was 5 bilaterally in both upper and lower extremities. She requires minimal assistance and transfers as a stand-by assist with set-up of cues. The patient's fall score is a 25 which makes her a low risk for falls. She is not up ad lib but does not need assistance with equipment or to stand or walk.
NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	The patient is alert and oriented x4 to person, place, time, and situation. She is able to move all extremities well with active and passive motion. PERLA was intact, with noting of the decreased vision in the left eye. The patient's strength was equal in all four extremities with a score of 5. Her speech was clear and without abnormalities. The patient is alert and awake while being able to respond to all stimuli. No signs of decreased sensory perception were noted.
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 enjoys watching TV to pass time while at the hospital. Her developmental level is appropriate for her age. The patient does not define herself with any religion. The patient was explaining that "she is very thankful for her family and doesn't know what she would do without them". She lives at home with her husband and her daughters and grandkids visit often. Her husband has recently moved from full-time to part time in order to be home with her more. The patient has a good support system at home.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0745	56 bpm	132/72 mmHg	18 resp	36.8 °C	96% on 3L nasal cannula

1055	58 bpm	114/64 mmHg	17 resp	36.4 °C	96% on 3L nasal cannula

Vital Sign Trends: The patient's vital signs were overall stable and consistent with slight bradycardia noted. The first set of vitals were taken a few minutes after a bathroom trip therefore systolic blood pressure was slightly elevated but trended down later in the day. All other vital signs were within defined limits.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0745	Numeric	N/A	0	N/A	N/A
1055	Numeric	N/A	0	N/A	N/A

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: N/A **Location of IV:** N/A **Date on IV:** N/A **Patency of IV:** N/A **Signs of erythema, drainage, etc.:** N/A **IV dressing assessment:** N/A	N/A because the patient lost IV access overnight and was being discharged during the day therefore the doctor approved no new IV insertion.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
600 mL of water	300 mL of urine

Nursing Care

Summary of Care (2 points)

Overview of care:

After receiving report on the patient, I went in and introduced myself and got her vitals at 0745. I then did her head-to-toe assessment shortly after I obtained her vital signs and assessed her pain. At 0915, I went with my professor and passed her morning meds which included apixaban, ascorbic acid, aspirin, pantoprazole, prednisone, furosemide, and her hydroxyzine. I took the patient to the bathroom once around 0930 and offered her a bath which she refused because she "was going to wait until she got home". I was able to sit and chat with her until I had to get her vitals again at 1055 where I also reassessed her pain.

Procedures/testing done:

The patient did not leave the floor or have any procedures or diagnostic testing done during the clinical day.

Complaints/Issues:

The patient did not verbalize any complaints or issues during the clinical day.

Vital signs (stable/unstable):

The patient's vital signs were stable with a slightly elevated systolic blood pressure of 132 mmHg and a bradycardic pulse rate of 56 and 58 beats per minute.

Tolerating diet, activity, etc.:

The patient was tolerating her diet, fluid restriction, and activities well during the clinical day.

Physician notifications:

The physician was not notified about any issues throughout the clinical day.

Future plans for client:

The plan for the patient is to discharge home this afternoon with her husband and to follow up with her primary care physician.

Discharge Planning (2 points)

Discharge location:

The patient's plan is to discharge back home with her husband.

Home health needs (if applicable):

N/A

Equipment needs (if applicable):

N/A

Follow up plan:

The patient will discharge home and follow up with her primary care physician and other specialties if deemed necessary by her primary.

Education needs:

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 CHF as evidenced by mild bilateral pleural effusions and pitting edema	I chose this diagnosis first because the patient presented with fluid on/in her lungs and had to be drained	1. Monitor daily weight 2. Maintain sodium and fluid restriction	1. Patient will present with 0 edema by the end of the hospital stay	• The patient responded well to the intervention. • Upon assessment there was no edema noted • Goal was met

on admission	of her fluid before going home.			
2. Activity intolerance related to decreased oxygen related to patient verbalizing shortness of breath on ambulation	I chose this diagnosis second because the patient was having to catch her breath after walking to the bathroom and it has to do with her breathing.	1. Adjust activities to tolerance 2. Encourage regular exercise and physical therapy	1. Patient will be able to perform ADLs with few reports of dyspnea by the end of the hospital stay	• The patient understands her limitations. • The patient was still short of breath after walking to the bathroom. • Goals partially met
3. Risk for decreased cardiac output related to altered myocardial contractility as evidenced by enlarged heart and decreased SaO2 upon admission	I chose this diagnosis third because it is a risk, and it pertains to circulation but the patient was experiencing poor perfusion on admission.	1. Monitor oxygen saturation 2. Assist the patient to high fowlers position	1. Patient's oxygen saturation will remain above 92% throughout hospital stay.	• The patient responded well to interventions. • Her oxygen was 96% both assessment times. • Goals were met
4. Anxiety and powerlessness related to COPD and history of anxiety as evidenced by patient expressing feeling increasingly anxious	I chose this diagnosis last because it is not a direct priority, but the patient is having a rough month and expressed feelings of anxiety lately	1. Provide a calm environment 2. Monitor neurological and emotional status	1. Patient will express decreased feelings of anxiety throughout the hospital stay.	• Patient responded well to interventions. • The patient stated that her meds are helping her. • Goals were partially met

Other References (APA):

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (2022). *Brunner & Suddarth's textbook of*

medical-surgical nursing (15th ed.). Wolters Kluwer.

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

Schwinger, R. H. (2021). Pathophysiology of heart failure. *Cardiovascular diagnosis and therapy*, *11*(1), 263.

Concept Map (20 Points):

Subjective Data

The patient stated that she "tries to follow a cardiac diet at home."

The patient stated that her pain "started at her toes and ran up her body to her chest"

The patient stated that she "has had a rough month and is thankful for her family."

Nursing Diagnosis/Outcomes

Diagnosis	Outcome Goals
Excess fluid volume related to CHF as evidenced by mild bilateral pleural effusions and pitting edema on admission	Patient will present with 0 edema by the end of the hospital stay
Activity intolerance related to decreased oxygen related to patient verbalizing shortness of breath on ambulation	Patient will be able to perform ADLs with few reports of dyspnea by the end of the hospital stay
Risk for decreased cardiac output related to altered myocardial contractility as evidenced by enlarged heart and decreased SaO2 upon admission	Patient's oxygen saturation will remain above 92% throughout hospital stay.
Anxiety and powerlessness related to COPD and history of anxiety as evidenced by patient expressing feeling increasingly anxious	Patient will demonstrate adequate cardiac output by maintaining vital signs within expected limits throughout the hospital stay

Objective Data

- Oxygen: 96% on 3L nasal cannula
- Diminished breath sounds in the lower lobes.
- Mild bilateral pleural effusions
- Enlarged heart size.
- Lactic acid of 2.3
- BNP of 716
- PaO2 of 30 mmHg
- PaCO2 of 61.3 mmHg
- HCO3 of 27.5 mmol/L
- SaO2 of 50.2%
- Heart rate of 56 and 58 beats per minute

Client Information

The patient is a 65 year old female with a past medical history of advanced chronic obstructive pulmonary disorder, bilateral carotid artery disease, bradycardia, cardiomyopathy, left carotid occlusion, chest pain, chronic obstructive pulmonary disorder (COPD), chronic serous otitis media, left, coronary artery disease, cerebrovascular accident resulting in disturbance of vision, diastolic dysfunction, dyspnea on exertion, frequent premature ventricular contractions, gastrointestinal bleed, congestive heart failure (CHF), hyperlipidemia, hypertensive cardiovascular disease, mitral regurgitation, mitral valve prolapse, non-sustained ventricular tachycardia, paroxysmal atrial fibrillation, psoriatic arthritis, pulmonary nodule, left atrial appendage litigation, supraventricular tachycardia, and thrombosis of left carotid artery. Admitted on 03/03/2023 due to c/o shortness of breath and radiating pain at rest.

Nursing Interventions

1. Monitor daily weight 2. Maintain sodium and fluid restriction
1. Adjust activities to tolerance 2. Encourage regular exercise and physical therapy
1. Monitor oxygen saturation 2. Assist the patient to high fowlers position
1. Provide a calm environment 2. Monitor neurological and emotional status