N441 Care Plan

Lakeview College of Nursing

Cidney Hinchman

Demographics (3 points)

Date of Admission 2/2/22	**Client Initials** S.M.	**Age** 77 years old	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Widowed	**Allergies** Atorvastatin and Midazolam
Code Status Full Code	**Height** 5'5"	**Weight** 204 pounds	

Medical History (5 Points)

Past Medical History: The patient has a past medical history that includes congestive heart failure, diabetes mellitus type 2, basal cell carcinoma, squamous cell carcinoma, pseudoaneurysm of an artery of the upper extremity, anemia, a non-ST elevation myocardial infarction (NSTEMI), community-acquired pneumonia, hyperlipidemia, peripheral vascular disease, benign essential hypertension, chronic low back pain with sciatica, acute respiratory failure with hypoxia and hypercapnia, and atherosclerosis of coronary artery.

Past Surgical History: The patient has a past surgical history that includes an abdominal aortic aneurysm repair, appendectomy, a biopsy of skin lesions, cholecystectomy, a partial colectomy, an exploratory of the abdomen, hysterectomy, and an upper GI endoscopy.

Family History: The patient reported that her mom died of brain cancer at 57, her dad died of a heart attack at 57, her maternal grandmother had cirrhosis of the liver, her maternal grandfather had a heart attack, her paternal grandmother had diabetes, and her paternal grandfather had a heart attack.

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): The patient reports that she is a former smoker that used to smoke two packs a day for 25 years. The patient quit smoking five years ago. The patient reports drinking one glass of wine once a

week. The patient did not report how long she has been drinking alcohol. The patient also denies the use of any other drugs.

Assistive Devices: The patient has been using a walker during her stay at the hospital but reports no use of assistive devices when she is at home.

Living Situation: The patient lives at home by herself.

Education Level: The patient has a college degree in computer technology.

Admission Assessment

Chief Complaint (2 points): The patient had a chief complaint of generalized weakness and shortness of breath.

History of Present Illness – OLD CARTS (10 points): Onset: On February 2nd, a 77 y/o Caucasian, widowed, female, came to the emergency department by ambulance complaining of generalized weakness and shortness of breath. **Location:** The patient reports that she was experiencing pain in her chest and overall general weakness throughout her entire body. The patient also later complained of abdominal pain. **Duration:** The patient stated, “I have felt weak and short of breath for three days.” **Characteristics:** The patient stated, “My whole-body hurts and I feel like I cannot get a deep breath in like I just feel as if I do not have enough air.” The patient denied any fever, nausea, or vomiting. Although the patient did report that she is experiencing some diarrhea. **Associated and Aggravated Manifestations:** The patient reported that walking or doing any kind of exercise exacerbated her shortness of breath and tired her out faster than usual. **Relieving factors:** The patient stated, “I just tried to lay down and rest because as long as I was not up and moving around my shortness of breath did not seem as bad.”

Treatment and Timing: The patient has not had any previous treatment for the current

symptoms she is experiencing. **Severity:** The patient reported that her pain level was a six at the time of admission.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Congestive heart failure

Secondary Diagnosis (if applicable): Bilateral pleural effusion

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

The patient came into the emergency department at OSF Heart of Mary Medical Center on February 2nd with generalized weakness and shortness of breath complaints. The emergency department completed a computerized tomography angiogram of the chest with and without contrast, an x-ray of the chest, and a computerized tomography of the abdomen and pelvis with contrast. The patient also had a full workup of laboratory data. Upon further examination after the diagnostic and laboratory data came back, the patient was admitted for a primary diagnosis of congestive heart failure with a secondary diagnosis of bilateral pleural effusion.

Congestive heart failure is a severe chronic progressive condition that typically occurs after other conditions have damaged or weakened the heart, such as coronary artery disease, hypertension, diabetes, and obesity (Mayo Clinic, 2021). However, congestive heart failure can also occur if the ventricle within the heart becomes stiff and does not efficiently fill between beats (Mayo Clinic, 2021). Gradually the ventricles will stretch and no longer be able to pump blood through the body efficiently (Mayo Clinic, 2021). It can cause the blood to back up when this occurs, resulting in fluid buildup in the lungs, abdomen, liver, and lower body (Macon, 2021). At the beginning of congestive heart failure, patients may notice fatigue, swelling in their ankles, feet, and legs, weight gain, and an increased need to urinate, especially at night (Macon,

2021). As congestive heart failure progresses, a patient may notice an irregular heartbeat, a cough that develops from congested lungs, wheezing, and shortness of breath which could indicate pulmonary edema (Macon, 2021). Patients may also experience other symptoms indicative of a severe heart condition, such as chest pain that radiates through the upper body, rapid breathing, cyanosis, and fainting (Macon, 2021). Upon arrival to the emergency department, the patient was experiencing shortness of breath, generalized weakness, and abdominal pain. Thus, the patient made an excellent choice to seek treatment.

Congestive heart failure has many risk factors that can place a person at an increased risk, such as coronary artery disease, heart attack, heart valve disease, hypertension, irregular heartbeats, congenital heart diseases, diabetes, certain medications like diabetic or nonsteroidal anti-inflammatory drugs, alcohol use, sleep apnea, smoking or using tobacco, obesity, and certain viral infections (Mayo Clinic, 2021). The patient was at an increased risk because she has diabetes, obesity, a history of smoking, hypertension, and peripheral vascular disease. Many complications can arise with congestive heart failure, such as kidney damage or failure, heart valve problems, heart rhythm problems, and liver damage (Mayo Clinic, 2021). Therefore, patients need to seek medical attention and get treatment as soon as possible to prevent further complications.

Additionally, congestive heart failure can cause laboratory issues due to the lack of blood pumping and fluid buildup. A commonly used test to determine if a patient has congestive heart failure is a brain natriuretic peptide. The patient brain natriuretic peptide was elevated on admission with a value of 322 pg/mL. The physician will do a physical assessment and listen for any fluid buildup or murmurs that could suggest heart failure (Mayo Clinic, 2021). In addition, the physician may also order a chest x-ray, an electrocardiogram, an echocardiogram, a stress

test, a computerized cardiac tomography, magnetic resonance imaging, a coronary angiogram, or a myocardial biopsy (Mayo Clinic, 2021). The patient had a chest x-ray and a computerized cardiac tomography completed, which helped to confirm her congestive heart failure and identify a bilateral pleural effusion. Treatment options can include a variety of medications, including ACE inhibitors, angiotensin II receptor blockers, beta-blockers, diuretics, aldosterone antagonists, positive inotropes, digoxin, hydralazine, isosorbide dinitrate, and vericiguat (Mayo Clinic, 2021). During the patient's stay, she has been receiving furosemide and hydralazine hydrochloride. The patient was already taking spironolactone at home to help treat her hypertension which will now also help with her congestive heart failure. Furthermore, the patient was feeling much better and was planning to be discharged home within 24 hours.

Pathophysiology References (2) (APA):

Macon, B. L. (2021, June 2). *Congestive Heart Failure (CHF)*. Healthline. https://www.healthline.com/health/congestive-heart-failure

Mayo Clinic. (2021, December 10). *Heart failure - Symptoms and causes*. https://www.mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142

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	4-5.5 million cells	2.43 million cells	2.92 million cells	RBCs are decreased due to the patient's anemia (Capriotti, 2020).
Hgb	12-15 g/dL	7.1 g/dL	8.4 g/dL	Hemoglobin is decreased due to the patient's anemia (Capriotti, 2020).
Hct	42% to 52%	21.7%	24.4%	Hematocrit is decreased due to the insufficient supply of healthy red blood cells caused by the patient's

				anemia (Capriotti, 2020).
Platelets	150,000 – 400,000 cells/ mm3	282,000 cells/mm3	261,000 cells/mm3	N/A
WBC	4,500 – 11,000 cells/ mm3	6.5 cells/mm3	5.3 cells/ mm3	N/A
Neutrophils	45% to 75%	68%	52%	N/A
Lymphocytes	20% to 40%	22%	28%	N/A
Monocytes	4% to 6%	4.2%	5.8%	N/A
Eosinophils	Less than 7%	0.4%	0%	N/A
Bands	0.0% - 1.0%	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**	**Today's Value**	**Reason For Abnormal**
Na-	135 – 145 mEq/L	141 mEq/L	140 mEq/L	N/A
K+	3.5 – 5.0 mEq/L	4.2 mEq/L	3.7 mEq/L	N/A
Cl-	98 – 108 mEq/L	109 mEq/L	101 mEq/L	Elevated chloride can indicate that the patient is dehydrated (Capriotti, 2020). Elevated chloride is also consistent with the patient's body being in a metabolic acidosis state at the time of admission (Capriotti, 2020).
CO2	22 -29 mEq/ L	23 mEq/L	27 mEq/ L	N/A
Glucose	70-100 mg/dL	265 mg/dL	342 mg/ dL	Blood sugar likely elevated due to the patient diabetes mellitus and the body's trauma response (Capriotti, 2020).
BUN	8 – 25 mg/dL	36 mg/dL	50 mg/dL	Elevated BUN can indicate that the patient is dehydrated or that the patient's kidneys are not working as they should (Capriotti, 2020).
Creatinine	0.6 – 1.3 mg/dL	1.31 mg/dL	1.59 mg/dL	Elevated creatinine levels indicate impaired kidney function (Capriotti, 2020).

Albumin	3.5 – 5.2 mg/dL	3.6 mg/dL	NA	N/A
Calcium	8.6 – 10 mg/dL	9.2 mg/dL	8.8 mg/dL	N/A
Mag	1.6 – 2.6 mg/dL	1.4 mg/dL	NA	Decreased magnesium levels could be due to the patient's inadequate dietary intake, diarrhea, or diabetes (Capriotti, 2020).
Phosphate	2.5 – 4.5 mg/dL	N/A	N/A	N/A
Bilirubin	Less than 1.5 mg/dL	0.3 mg/dL	N/A	N/A
Alk Phos	20 – 140 U/L	80 U/L	N/A	N/A
AST	10 – 30 units/L	15 units/L	N/A	N/A
ALT	10 – 40 units/L	15 units/L	N/A	N/A
Amylase	40-140 U/L	N/A	N/A	N/A
Lipase	Younger than 60 is 10 to 140 U/L Older than 60 is 24 to 151 U/L	19.35 U/L	N/A	Decreased lipase levels can indicate that there is damage to the cells in the pancreas (Capriotti, 2020). Decreased lipase can also indicate kidney failure (Capriotti, 2020).
Lactic Acid	4.5-19.8 mg/dL	0.9 mg/dL	N/A	Decreased lactic acid levels is consistent with the patient's diagnosis of congestive heart failure (Capriotti, 2020).
Troponin	0-0.04 ng/mL	0.650 ng/mL	N/A	Increased troponin levels are consistent with the patient's congestive heart failure and cardiomyopathy (Capriotti, 2020).
CK-MB	5-25 IU/L	N/A	N/A	N/A
Total CK	22-198 U/L	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	Value on	Today's	Reason for Abnormal

	Range	Admission	Value	
INR	1 second	1 second	N/A	N/A
PT	9.5 – 11.3 seconds	11 seconds	N/A	N/A
PTT	30 – 40 seconds	30 seconds	N/A	N/A
D-Dimer	Less than or equal to 250 ng/mL	1,244 ng/ mL	N/A	The patient's d-dimer is likely elevated due to her congestive heart failure (Capriotti, 2020).
BNP	15.00 – 99.90 pg/mL	322 pg/mL	N/A	These values are consistent with the patient's diagnosis of congestive heart failure (Capriotti, 2020).
HDL	More than 60 mg/dL	N/A	N/A	N/A
LDL	Less than 130 mg/dL	N/A	N/A	N/A
Cholesterol	Less than 200 mg/dL	N/A	N/A	N/A
Triglycerides	Less than 150 mg/dL	N/A	N/A	N/A
Hgb A1c	Less than 7%	N/A	N/A	N/A
TSH	0.4 – 4.0 mU/L	N/A	N/A	N/A

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Colorless, yellow, clear	Colorless, yellow, clear	N/A	N/A
pH	4.5 - 8	6	N/A	N/A
Specific Gravity	1.005 – 1.035	1.010	N/A	N/A
Glucose	Negative	Negative	N/A	N/A
Protein	Negative	Negative	N/A	N/A
Ketones	Negative	Negative	N/A	N/A
WBC	Negative	Negative	N/A	N/A

RBC	Negative	Negative	N/A	N/A
Leukoesterase	Negative	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 to 7.45	7.28	N/A	A decreased level of pH in the blood means that the patient's blood is more acidic (Capriotti, 2020).
PaO2	80-100	72	N/A	A decreased PaO2 is indicating that the lungs are not able to properly oxygenate likely due to the increased fluid caused by the patient's congestive heart failure (Capriotti, 2020).
PaCO2	35-45	57	N/A	An increased PaCO2 is consistent with the patient's decreased pH indicating that the patient is in metabolic acidosis (Capriotti, 2020).
HCO3	22-26	24.1	N/A	N/A
SaO2	95%-100%	95%	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	Clean catch, no growth	No growth within 1 day, results were negative	N/A	N/A
Blood Culture	No growth after 3 days	No growth within 5 days, results were negative	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A

	results showing no harmful bacteria			
Stool Culture	Negative results showing no abnormal bacteria or other organism	Negative results showing no abnormal bacteria or other organism	N/A	N/A

Lab Correlations Reference (1) (APA):

Capriotti, T. (2020). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis.

Kee, J.L.F. (2017). *Pearson handbook of laboratory & diagnostic tests with nursing implications.* Pearson.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- X-ray chest single view 2/2/2022
    - An x-ray uses ionizing radiation to create and show pictures of the inside of the patient's chest to help assess the patient's lungs, heart, and chest wall (Acr, 2020). For this specific patient, the x-ray was completed to further assess the patient's complaints of shortness of breath, generalized weakness, and cough. The x-ray reidentified the patient's atherosclerosis of the coronary artery. The x-ray showed mild central pulmonary vascular prominence within the pulmonary vessels and hila. The x-ray showed increased density of the left mid to lower lung and right lower lung. The x-ray showed no signs of a pneumothorax and noted degenerative changes of the spine. The impression of the x-ray identified tiny bilateral pleural

effusions. Overall, the patient tolerated the x-ray and was diagnosed with bilateral pleural effusions which is consistent with the symptoms she was experiencing.

- CT angiogram chest with and without contrast 2/2/2022
    - This computerized tomography was completed to further assess the patient's elevated d-dimer, shortness of breath, cough, and concern for a pleural effusion. A computerized tomography angiography is a common diagnostic tool used to diagnose and treat blood vessel diseases such as an aneurysm or blockage (Acr, 2019). The scan showed an enlarged and calcified coronary artery. The mitral valve annulus also showed some calcification. However, there were no indications of a pericardial effusion but there were findings of interstitial edema and small to moderate bilateral pleural effusion. The lungs and airway were visualized with the airway showing patency and the left upper lobe showing some pulmonary opacification indicating air trapping. Overall, the patient tolerated the CT angiogram, and the scan confirmed the bilateral pleural effusion but showed no definite defects within the main, left, or right pulmonary arteries.
- CT abdomen pelvis with contrast 2/2/2022
    - The computerized tomography was completed to further assess the patient's complaint of abdominal pain in her left lower quadrant. A computerized tomography of the abdomen and pelvis is commonly used to discover a condition within one of the internal organs (Acr, 2021). The computerized tomography can also be used to assess unexplained pain (Acr, 2021). The scan showed that the patient's liver, spleen, adrenals, and interior vena cava were all normal in size. The scan did not identify any abnormalities within the patient's pancreas,

stomach, or retroperitoneum. The scan reidentified the patient's history of a cholecystectomy, hysterectomy, and partial colectomy. The patient's left kidney measured larger than expected which was noted for concern of malignancy. The scan noted ectasia of the infrarenal abdominal aorta. The colon showed some diverticulosis without diverticulitis present. Overall, the patient tolerated the CT of the abdomen and pelvis well with a urology consultation recommended.

- X-ray chest single view 2/5/2022
    - An x-ray uses ionizing radiation to create and show pictures of the inside of the patient's chest to help assess the patient's lungs, heart, and chest wall (Acr, 2020). For this specific patient, the x-ray was completed to compare the patient's chest x-ray with the one that was completed on 2/2/2022. The x-ray reidentified the patient's atherosclerosis of the coronary artery. The x-ray showed mild central pulmonary vascular prominence within the pulmonary vessels and hila. The x-ray showed increased density of the left mid to lower lung and right lower lung. The pleura showed small bilateral pleural effusions with no signs of a pneumothorax. Overall, the patient tolerated the x-ray well and it showed no significant interval change between the one completed on 2/2/2022 and the one completed on 2/5/2022.

Diagnostic Test Correlation (5 points):

The patient came into the emergency department by ambulance with a chief complaint of generalized weakness and shortness of breath. Upon further evaluation, the patient complained of abdominal pain and reported that she was experiencing diarrhea. The patient had a chest x-ray and CT angiogram of the chest to further assess and evaluate the patient's shortness of breath,

generalized weakness, and cough. The patient also had a CT of the abdomen and pelvis done to further assess the patient's complaint of abdominal pain in the left lower quadrant. The diagnostic tests confirmed that the patient had bilateral pleural effusion, possible kidney malignancy with the recommendation to have a urology consult, and reidentification of some of the patient's past medical and surgical history.

Diagnostic Test Reference (1) (APA):

Acr, R. A. (2019, February 20). *CT Angiography (CTA)*. Radiologyinfo.Org. https://www.radiologyinfo.org/en/info/angioct

Acr, R. A. (2020, June 15). *X-ray (Radiography) - Chest*. Radiologyinfo.Org. https://www.radiologyinfo.org/en/info/chestrad#:%7E:text=X%2Dray%20(Radiography)%20%2D%20Chest&text=Chest%20x%2Dray%20uses%20a,fever%2C%20chest%20pain%20or%20injury.

Acr, R. A. (2021, February 8). *Computed Tomography (CT) - Abdomen and Pelvis*. Radiologyinfo.Org. https://www.radiologyinfo.org/en/info/abdominct

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)	Carvedilol (Coreg)	Spironolactone (Aldactone)	Amlodipine Besylate (Norvasc)	Aspirin (Acetylsalicylic acid)
Dose	650 mg	12.5 mg	12.5 mg	10mg	81 mg
Frequency	1 tablet q.4.h PRN	1 tablet bid with meals	Daily	Daily	Daily
Route	Oral	Oral	Oral	Oral	Oral

Classification	Nonsalicylate, para-aminophenol derivative, antipyretic, nonopioid analgesic	Nonselective beta blocker and alpha-1 blocker, antihypertensive, heart failure treatment adjunct	Potassium-sparing diuretic, diuretic	Calcium channel blocker, antianginal antihypertensive	Salicylate, anti-inflammatory, antipyretic, nonopioid analgesic
Mechanism of Action	Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system. Acetaminophen also acts directly on temperature-regulating center in the hypothalamus by inhibiting synthesis of prostaglandin E2.	Reduces cardiac output and tachycardia, causes vasodilation, and decrease peripheral vascular resistance, which reduces blood pressure and cardiac workload. When given for at least four weeks, carvedilol reduces plasma renin activity.	Acts primarily through competitive binding of receptors at the aldosterone-dependent sodium-potassium exchange site in the distal convoluted renal tubule.	Binds to dihydropyridine and non-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 coronary and vascular resistance, and reducing systolic and diastolic blood pressure. Decreased peripheral vascular resistance also reduces myocardial workload,	Blocks the activity of cyclooxygenase, the enzyme needed for prostaglandins synthesis. Prostaglandins, important mediators in the inflammatory response, cause local vasodilation with swelling and pain. With blocking of cyclooxygenase and inhibition of prostaglandins, inflammatory symptoms subside. Pain is also relieved because prostaglandins play a role in pain transmission from the periphery to the spinal cord. Aspirin inhibits platelet aggregation by interfering with production of thromboxane A2, a substance that stimulates platelet aggregation.

				oxygen demand, and possibly angina. Also, by inhibiting coronary artery muscle contractions and restoring blood flow, drug may relieve Prinz-metal's angina.	
Reason Client Taking	This medication is being given to the client to relieve mild to moderate pain.	This medication is being given to the patient to control hypertension.	This medication is being given to treat hypertension and heart failure.	This medication is being given to treat hypertension.	This medication is being given to prevent a heart attack and clot-related strokes.
Contraindications (2)	Severe hepatic impairment, hypersensitivity to acetaminophen or its components	Asthma or related bronchospastic conditions, cardiogenic shock	Acute renal insufficiency, hyperkalemia	Hypersensitivity to amlodipine or its components, unstable angina	Active bleeding or coagulation disorders, current or recent GI bleed or ulcers
Side Effects/Adverse Reactions (2)	Agitation, fatigue	Renal insufficiency, hypoglycemia	Anemia, thrombocytopenia	Hypotension, arrhythmias	Bronchospasms, GI bleeding
Nursing Considerations (2)	1. Take with food to help reduce any GI upset. 2. Acetaminophen can cause hepatotoxicity, so liver function tests need to be ordered and monitored.	1. Monitor patient's blood glucose level during therapy because it may alter blood glucose levels. 2. Use cautiously in patients with peripheral vascular disease because it may aggravate symptoms of arterial	1. Monitor for signs of fluid, electrolyte, or acid-base imbalances. 2. Frequently monitor blood pressure and presence and degree of edema.	1. Use cautiously in patients with heart block, heart failure, impaired renal function, hepatic disorder, or severe aortic stenosis. 2. Monitor blood pressure closely especially in patients with	1. Monitor renal and renal function and ototoxicity. 2. Be alert for signs of GI bleeding, including abdominal pain, vomiting blood, blood in stools or black, tarry stools.

		insufficiency.		heart failure or severe aortic stenosis because symptomatic hypotension may occur.	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess patient's vital signs and pain level.	Assess the patient's vital signs, blood glucose, BUN, potassium, triglyceride, uric acid, serum lipoprotein, monitor I/O, weight, and for any signs of fluid overload.	Assess patient's blood pressure, heart rate, ECG, heart sounds, potassium level, creatinine level, BNP, kidney function tests	Assess blood pressure, heart rate, ECG, heart sounds	Assess pain, PTT, PT, fibrinogen
Client Teaching needs (2)	1. Caution patient to not exceed the recommended dosage amount or take any other drug containing acetaminophen at the same time. 2. Teach patient to recognize signs of hepatotoxicity such as bleeding, easy bruising, and malaise.	1. Warn patient that the medication could make her feel dizzy and lightheaded after taking the prescribed dose. 2. Take the medication with food to minimize orthostatic hypotension.	1. Instruct patient to take the medication with meals or milk. 2. Teach the patient to monitor their own blood pressure and report any blood pressure greater than 140 systolic and 90 diastolic.	1. Tell the patient to take a missed dose as soon as they remember and the next dose in 24 hours. 2. Advise patient to have blood pressure checked routinely for possible hypotension.	1. Instruct patient to take aspirin with food or after meals because it may cause GI upset if taken on an empty stomach. 2. Tell patient to call provider if any symptoms of stomach or intestinal bleeding occur such as passage of blood or tarry stools or if patient is coughing up blood or vomit that looks like coffee grounds.

Hospital Medications (5 required)

Brand/Generic	Enoxaparin sodium (Lovenox)	Furosemide (Lasix)	Hydralazine hydrochloride (Apresline)	Nitroglycerin (Nitrocot)	Insulin Lispro (Humalog)
Dose	30 mg	40mg	10 mg	0.4 mg every 5 minutes up to 3	Sliding scale

				times	
Frequency	Once a day injection	1 tablet daily	q.6.h. PRN	PRN	A.C. & H.S.
Route	Subcutaneous	Oral	Intravenous	Sublingual	Subcutaneous
Classification	Low-molecular weight heparin, anticoagulant	Loop diuretic, antihypertensive, diuretic	Vasodilator, antihypertensive	Nitrate, antianginal, vasodilator	Antidiabetic, rapid-acting insulin
Mechanism of Action	Potentiates the action of antithrombin II, a coagulation inhibitor. By binding with antithrombin II, enoxaparin rapidly binds with and inactivates clotting factors (primarily factor Xa and thrombin). Without thrombin, fibrinogen can't convert to fibrin and clots can't form	Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation. As the body's plasma volume decreases, aldosterone production increases, which promotes sodium reabsorption and the loss of potassium and hydrogen ions. Furosemide also increases the excretion of calcium, magnesium, bicarbonate, ammonium, and phosphate. By reducing intracellular and extracellular fluid volume, the drug reduces blood pressure and decreases cardiac output. Over time, cardiac output returns to	May act in a manner that resembles organic nitrates and sodium nitroprusside, except that hydralazine is selective for arteries. It will exert a direct vasodilation effect on vascular smooth muscle, interfere with calcium movement in vascular smooth muscle by altering cellular calcium metabolism, dilate arteries, not veins, which minimizes orthostatic hypotension and increases cardiac output and cerebral blood flow, causes reflex autonomic	May interact with nitrate receptors in vascular smooth-muscle cell membranes. This interaction reduces nitroglycerin to nitric oxide, which activates the enzyme guanylate cyclase, increasing intracellular formation of cGMP. Increased cGMP level may relax vascular smooth muscle by forcing calcium out of muscle cells, causing vasodilation. Venous dilation decreases venous return to the heart, reducing left ventricular	Works to regulate the glucose metabolism. Binds to the insulin receptor, a heterotetrametric protein consisting of two extracellular alpha units and two transmembrane beta units. The binding of insulin to the alpha subunit of IR stimulates the tyrosine kinase activity intrinsic to the beta subunit of the receptor.

		normal.	response, and has a positive inotropic effect on the heart.	end-diastolic pressure and pulmonary artery wedge pressure. Arterial dilation decreases systemic arterial pressure, systemic vascular resistance, and mean arterial pressure. Thus, nitroglycerin reduces preload and afterload, decreasing myocardial workload and oxygen demand.	
Reason Client Taking	This medication is being taken to prevent the formation of clots.	This medication is being given to the client to reduce fluid buildup related to the patient's congestive heart failure.	This medication is being given to the patient to treat hypertension.	This medication is being given to the patient to treat acute anginal attacks.	This medication is being given for hyperglycemia due to diabetes mellitus type 2.
Contraindications (2)	Active major bleeding, history of heparin induced thrombocytopenia or immune-mediated HIT within the past 100 days or in the presence of circulating antibodies which may persist for several years	Anuria, hypersensitivity to furosemide or its components	Coronary artery disease, hypersensitivity to hydralazine and its components	Acute myocardial infarction, orthostatic hypotension	Hypoglycemia, hypokalemia

Side Effects/Adverse Reactions (2)	Hemorrhage, pulmonary edema	Arrhythmias, thromboembolism	Fever, headache	Hypotension, arrhythmias	Confusion, headache
Nursing Considerations (2)	1. Watch for client taking NSAIDS as it can increase the risk of bleeding. 2. Do not rub the site after injection to minimize bruising.	1. Obtain patient's weight periodically to monitor fluid loss. 2. Monitor patient for hypokalemia.	1. Monitor blood pressure and pulse rate regularly and weigh patient daily during therapy. 2. Anticipate that drug may change color in solution or when exposed to metal filter.	1. Use cautiously in patients with hypertrophic obstructive cardiomyopathy because nitrate therapy may aggravate angina in this condition. 2. Make sure the table is placed under the patient's tongue and that it dissolves completely.	1. When giving subcutaneous do not give it more than 15 minutes before a meal. 2. inspect skin areas that will be used for injection and use an area that's the least bruises, thickened, and scarred.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess the patient's INR, PT, aPTT, and vital signs.	Assess the patient's fluid status, weight, intake and output ratios, amount and location of edema, lung sounds, skin turgor, and mucous membranes.	Assess the patient's vital signs, weight, CBC, electrolytes, and ANA titer.	Assess the heart rate, ECG, heart sounds, blood pressure	Asses the patient's vital signs, blood glucose, and ensure they are about to eat.
Client Teaching needs (2)	1. Review safe handling of needles and the proper disposal after using the needles. 2. Inform patient they may bruise more easily and/ or bleed more easily.	1. Instruct the patient to take the medication at the same time each day to maintain therapeutic effects. 2. Instruct the patient to take furosemide in the morning or if multiple doses take the last dose	1. Instruct the patient to take hydralazine tablets with food. 2. Advise patients to change positions slowly especially in the morning and that hot showers could	1. Encourage the patient to change positions slowly to minimize orthostatic hypotension. 2. Inform patient that the medication commonly causes headaches,	1. Educate the patient to store the insulin at room temperature and discard after 28 days. 2. Teach the patient to replace needed and to not re use the same needle. Also educate them to

		a few hours before bed to avoid sleep disturbance from diuresis.	cause hypotension.	which typically resolves after a few days of continuous therapy.	never share their insulin injection supplies with anyone else.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). *2019 Nurse's drug handbook.* Burlington, MA.

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The client appeared to be in no discomfort or pain. A & O x 3 Oriented to person, time, place, & current events. Client appears overall content with no signs of discomfort or distress at the time of assessment.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 Skin color normal for race. Skin noted to be well-balanced and intact. Appeared hydrated and clean. Warm Normal turgor 2+ No rashes, bruises, or wounds noted. 18 No drains present.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head and neck are symmetrical, no bumps or lesions noted. Ears are free of discharge, no bumps or lesions noted. Upon inspection sclera was white, cornea was clear, conjunctiva was white with no lesions or discharge noted. Septum midline. No drainage or bleeding noted. No deviation or abnormalities noted. Patient has natural teeth on top and bottom. No lesions or bumps noted. Mouth is pink and moist.
CARDIOVASCULAR:	S1 and S2 heart sounds normal with no murmurs,

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:**	gallops, or rubs present. Patient had good air movement. The patient had a normal sinus rhythm with no artifacts or abnormal rhythms present. Pulse was 82 bpm radial Capillary refill is between 2-3 seconds. No neck distention or edema noted.
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:**	Patient had decreased lung sounds with rhonchi present. The patient complained of dyspnea. No crackles or wheezes noted. Respirations are labored and an increased effort to breath with the use of accessory muscles is noted. No ET tube is present. Respirations are 20 bpm The patient did not have a ventilator. No FiO2, TV, PEEP, or VAP prevention measures were noted.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	General diet at home Cardiac diet in the hospital 5’5” 204 pounds Bowel sounds are normoactive in each quadrant Bowel movement was one day ago. The client came in with reports of abdominal pain but reported no abdominal pain during my assessment. No pain or masses noted on palpation No abnormalities found upon inspection for distention, incision, wounds, or drains. Abdominal scars noted on abdomen and are consistent with the patient’s previous cholecystectomy and partial colectomy. No ostomy, nasogastric, or feeding/PEG tube present.
GENITOURINARY: **Color:** **Character:**	Clear yellow and no odor present. The patient voided 400mL of urine during my clinical day.

Quantity of urine: **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:** **CAUTI prevention measures:**	The perineal area was clean and dry with no redness or irritation present.
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 has no neurovascular deficits noted. ROM was good in all extremities with equal strength bilaterally. Patient is using a walker. The patient notes that she does not use any assistive devices at home. However, when she gets discharged, she will be using a walker while working with home health and physical therapy until she builds back up her strength. Steady gait and no loss of coordination when ambulating. The patient is a standby assist. The patient's fall score is 9. The patient is not at risk for falls.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Moves both arms and legs well bilaterally. Oriented to person, time, place, and current events. Patient has no impaired mental status. Patient has good overall vision. Patient has good speech with no difficulties noted. Alert and oriented x3
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):**	No deficits were noted. Patient does not specify a religion or what it means to her. The patient has no disabilities and has an appropriate developmental level for her age. When asking the patient about coping methods she spoke about how hard the past few years have been because she has had to deal with many losses and is now dealing with health issues of her own. She began to get happy when I asked about family. She stated, "You know the reason I stopped smoking after 25 years was because my daughter was about to have a baby of her own and she told me nobody who smoked or smelled

	like cigarette smoke would be around her baby. I tried quitting many times but that's all it took for me to be done for good. No way was cigarettes getting in the way of my grandchild." The patient continued to tell me that she has three children and four grandchildren that are her whole world. The patient lives alone but she manages with the support of her family. The patient also noted that she has coped in the hospital by being able to speak with the pastoral care every day since she got admitted.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0735	82 bpm radial	153/82 right arm	20 bpm	98.0 temporal	95% nasal cannula 1L
1100	84 bpm radial	132/76 right arm	18 bpm	97.3 temporal	97% room air

Vital Sign Trends/Correlation:

The patient's vital signs were all within normal limits besides the blood pressure. The normal blood pressure of a patient is around 120/80. The patient has an elevated blood pressure and has a history of hypertension. The patient normally takes Carvedilol at home but was prescribed Hydralazine Hydrochloride as needed intravenously while in the hospital. The medication was helpful in decreasing the blood pressure from when it was checked and given at 0730 to when we checked it again at 1100. The patient was scheduled for another dose of Hydralazine Hydrochloride at 1600.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

0735	Numeric scale 0-10	The patient reported no pain.	0/10	The patient denied any pain.	No interventions were necessary at the time for this patient.
1100	Numeric sale 0-10	The patient reported no pain.	0/10	The patient denied any pain.	No interventions were necessary at the time for this patient.

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	20 gauge Right antecubital fossa 0300 2/5/22 Patent Saline locked No signs of erythema or drainage noted. No redness or irritation was noted. Overall, the site looked clean, dry, and intact.
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:** **Date of insertion:** **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	The patient did not have a PICC, port, or central line. This is not applicable to my patient.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
The patient ate 100% of breakfast and drank roughly 480 mL of water. The patient did not eat lunch during my clinical time. The patient did not have any IV fluids running at the time	The patient used the bathroom once during my clinical day with a void of 400mL of urine. The patient did not have a bowel movement or any other output during my

of my presence. Total intake – 480 mL	clinical day. Total urine output – 400 mL

Nursing Care

Summary of Care (2 points)

Overview of care: The patient started my clinical day off on a nasal cannula at 1L. The goal of the day was for her to be completely weaned off oxygen with the hopes of her being able to go home. By 1100 the patient was completely weaned off and on room air with her oxygen saturation and vital signs stable. The patient had an elevated blood pressure of 153/82 at 0735 and 132/76 at 1100. The patient was given Hydralazine hydrochloride intravenously at 0800 which explains the decrease in the patient's blood pressure when reassessed at 1100. The patient had come in with a chief complaint of generalized weakness and shortness of breath. The patient had a computerized cardiac tomography, a chest x-ray, and a computerized tomography of the abdomen and pelvis along with a complete laboratory work up. The patient's diagnostic and laboratory results showed that the patient had congestive heart failure and bilateral pleural effusion. The patient was given furosemide for the fluid buildup in the lungs, hydralazine hydrochloride to treat her hypertension, and spironolactone to treat her hypertension and new diagnosis of congestive heart failure. The patient reported no pain during my clinical day. The patient started my clinical day with oxygen via nasal cannula on 1L and was shortly on room air after that and maintaining an oxygen saturation of 95% and above. The patient was on a cardiac diet with no fluid restrictions and drank 480 mL of water with a 400mL output of urine. The patient is a standby assist with no gait disturbance during ambulation. The patient is planning to

be discharged home within the next 24 hours and will have home health and physical therapy coming a few times a week to assist until she can completely restore her strength.

Procedures/testing done: The patient did not leave the floor or have any testing done while I was there.

Complaints/Issues: The patient had no complaints or issues.

Vital signs (stable/unstable): The patient's blood pressure was elevated. The patient was given hydralazine hydrochloride to treat her hypertension and it had decreased from the initial assessment at 0735 to the next assessment at 1100.

Tolerating diet, activity, etc.: The patient is on a cardiac diet with no fluid restrictions. The patient seemed to be tolerating the diet well. The patient utilized a walker with a standby assist with no gait disturbance noted.

Physician notifications: No notifications were presented at this time.

Future plans for client: The patient will hopefully be discharged within the next 24 hours. The patient plans to go home with the help of home health and physical therapy a few times a week until she builds back up her strength. The patent will see a cardiologist and urologist once discharged. Until then the patient will continue to be monitored at the hospital until discharged.

Discharge Planning (2 points)

Discharge location: The patient stated, "I will be going back home." The patient lives alone but has three children and four grandchildren who will be there often to help her.

Home health needs (if applicable): The patient noted that she has been speaking with case management to get the approval to go home with home health and physical therapy. If

approved they will be coming to her home a few times a week for several weeks to help assist her with activities of daily living and help to build back up her strength.

Equipment needs (if applicable): The patient has been using a walker during her stay at the hospital but said she does not use any assistive devices at home. However, she will go home with a walker for the meantime until she builds her strength back up to not need one anymore.

Follow up plan: The patient will follow up with a cardiologist within two weeks of her discharge date. The patient will also have a referral to see a urologist at the earliest convenience.

Education needs: The patient will need discharge education on the use of an incentive spirometer, a heart healthy diet, benefits of exercising, monitoring of vital signs and weight, and any changes in her medication list.

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. Impaired gas exchange related to altered oxygen-supply	The patient came in with complaints of dyspnea, has	1. Place the patient in a high fowler's position	1. Maintain an oxygen saturation of 95% or above.	The patient maintained an oxygen saturation of 95% or above

as evidenced by dyspnea.	excess fluid in the lungs, and has a decreased level of hemoglobin which can all affect gas exchange.	2. Administer supplemental oxygen as needed		during my clinical day. The patient was on oxygen via nasal cannula at 1L but was weaned completely off with no problems. The patient responded well. Overall, the goals were met, and no modifications need to be made.
2. Ineffective breathing pattern related to decreased lung expansion as evidenced by use of accessory muscles.	The patient complained of dyspnea. The patient had excess fluid in the lungs resulting in pulmonary edema and causing the patient to have rhonchi present. An increased effort to breath with the use of accessory muscles was noted upon assessment of the patient.	1. Assess the patient's respiratory function and auscultate breath sounds every 4 hours. 2. Use of an incentive spirometer every 2 hours or as often as the patient can handle.	1. Decreased effort to breath with a decreased use of accessory muscles.	The patient was stable at the end of my clinical day. However, the patient was still presenting with an increased effort to breath with the use of accessory muscles. The patient will continue to use the incentive spirometer every 2 hours or more often as tolerated. The nurse will continue to reassess the patient's respiratory system every 4 hours. The goal was not met. However, the patient will continue to work on increasing her lung expansion with the use of the incentive spirometer.
3. Excess fluid volume related to decreased cardiac output as evidenced by abnormal breath	Upon assessment, rhonchi were present. An increased effort with the use of	1. Administer furosemide. 2. Auscultate breath sounds and monitor the	1. No adventitious breath sounds	The patient was given furosemide to continue decreasing the amount of fluid buildup within the lungs. Rhonchi

sounds.	accessory muscles was noted. The patient has bilateral pleural effusion caused by the fluid buildup due to her congestive heart failure.	patient's dyspnea.		were still present but will hopefully continue to diminish along with the dyspnea once the furosemide gets rid of the fluid. The patient's goals were not met. The patient will continue furosemide even after being discharged home. The patient was satisfied with her plan of care.
4. Risk for infection related to hyperglycemia as evidenced by blood glucose level of 342.	The patient has diabetes mellitus type two and had a blood glucose level of 342 during my clinical day. The patient's diabetes causes peripheral nerve damage and reduced blood flow to the extremities resulting in a higher chance for bacteria to grow and infections to quickly develop.	1. Control blood sugar level 2. Teach and promote good hygiene	1. Maintain a blood sugar level of 70 - 100	The patient did not eat lunch while I was there, so I was unable to determine if her blood glucose had went down from breakfast. However, the patient informed me that when she is at home her blood sugar is controlled and stays within the appropriate range but since she has been in the hospital she has been eating more. The patient will continue to watch what she eats and take her insulin as needed to maintain her blood sugar within the appropriate range.
5. Risk for impaired skin integrity related to decreased activity level as	The patient has had a complaint of generalized weakness since she came into	1. Encourage frequent position changes.	1. Change positions every two hours with 3 walks a day in the hallway.	The patient changed positions frequently. The patient got up and into the recliner

evidenced by generalized weakness.	the hospital due to the congestive heart failure. The patient also noted that she has lost some of her strength since being in the hospital because she has not moved nearly as much as she would when she is home.	2. Encourage ambulation including walks in the hallway with the help of the nursing staff.		during my clinical day. The patient walked in the hallway with her family member after breakfast. I was unable to observe the other two walks because they would not be done during my clinical day. The patient understood the importance of frequent ambulation and knew she needed to build up her strength. Overall, the goals were met. No modifications need to be made to the plan of care.

Other References (APA):

Vera, M. B. (2019, April 10). *3 Hemothorax and Pneumothorax Nursing Care Plans*. Nurseslabs. https://nurseslabs.com/3-hemothoraxpneumothorax-nursing-care-plans/

Vera, M. B. (2022, January 9). *17 Diabetes Mellitus Nursing Care Plans*. Nurseslabs. https://nurseslabs.com/diabetes-mellitus-nursing-care-plans/3/

Vera, M. B. (2022, January 14). *18 Heart Failure Nursing Care Plans*. Nurseslabs. https://nurseslabs.com/heart-failure-nursing-care-plans/3/

Concept Map (20 Points):

Subjective Data

- Smoked two packs of cigarettes a day for 25 years but quit nearly 5 years ago
- Drinks one glass of wine once a week
- Client complained of generalized weakness, dyspnea, and abdominal pain
- Patient rated her pain a 6 at the time of arrival to the emergency department.
- Patient reported no pain during my clinical day.
- Patient denied any fever, nausea, or vomiting.
- The patient stated, “My whole-body hurts and I feel like I cannot get a deep breath in like I just feel as if I do not have enough air.”

Nursing Diagnosis/Outcomes

1. Impaired gas exchange related to altered oxygen-supply as evidenced by dyspnea.
   - Goal - Maintain an oxygen saturation of 95% or above.
2. Ineffective breathing pattern related to decreased lung expansion as evidenced by use of accessory muscles.
   - Goal - Decreased effort to breath with a decreased use of accessory muscles.
3. Excess fluid volume related to decreased cardiac output as evidenced by abnormal breath sounds.
   - Goal - No adventitious breath sounds
4. Risk for infection related to hyperglycemia as evidenced by blood glucose level of 342.
   - Goal - Maintain a blood sugar level of 70 -100
5. Risk for impaired skin integrity related to decreased activity level as evidenced by generalized weakness.
   - Goal - Change positions every two hours with 3 walks a day in the hallway.

Objective Data

- The patient’s RBCs, Hgb, Hct, magnesium, lipase, pH, and PaO2 were all decreased.
- The patient’s PaCO2, d-dimer, BNP, troponin, creatinine, chloride, BUN, and glucose were all elevated.
- The patient received furosemide to decrease her fluid accumulation, hydralazine hydrochloride to treat her hypertension, and spironolactone to treat her hypertension and congestive heart failure.
- The patient had rhonchi present.
- The patient had labored respirations and an increased effort to breath with the use of accessory muscles noted.
- Blood pressure was elevated and then slowly decreased once given hypertensive medications.
- The patient was A & O x3.

Client Information

The patient is a 77-year-old female who came to the emergency department with complains of generalized weakness and dyspnea. The patient was admitted with a primary diagnosis of congestive heart failure and a secondary diagnosis of bilateral pleural effusion. The patient has a history of diabetes mellitus type 2, peripheral vascular disease, hypertension, and anemia. The patient has an allergy to atorvastatin and midazolam. The patient is a full code. The patient is 5’5” and 204 pounds.

Nursing Interventions

1. Place the patient in a high fowler’s position.
2. Administer supplemental oxygen as needed.

1. Assess the patient’s respiratory function and auscultate breath sounds every 4 hours.
2. Use of an incentive spirometer every 2 hours or as often as the patient can handle.

1. Administer furosemide.
2. Auscultate breath sounds and monitor the patient’s dyspnea.

1. Control blood sugar level.
2. Teach and promote good hygiene.

1. Encourage frequent position changes.
2. Encourage ambulation including walks in the hallway with the help of the nursing staff.