N311 Care Plan 2

Lakeview College of Nursing

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Demographics (5 points)

Date of Admission 10/21/2020	**Patient Initials** WA	**Age** 12/14/41 (78 y.o)	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired from Construction	**Marital Status** Married	**Allergies** Aspirin- Anaphylaxis
Code Status Full	**Height** 5'8" (172.72 cm)	**Weight** 126 lbs. (57.15 kg)	

Medical History (5 Points)

Past Medical History: Hypertension, Chronic kidney failure- currently receiving dialysis

Past Surgical History: appendectomy (1959), umbilical hernia (herniorrhaphy-1991)

Family History: Maternal (deceased)- CHF, hypertension, Paternal (deceased)- Congenital heart defect (hole in heart), Brother- Prostate cancer, Maternal grandfather (deceased)- Melanoma

Social History (tobacco/alcohol/drugs): Patient states: "I smoke a few a day. I've smoked for 60 years but I'm trying to quit". Patient states: "I drank a lot of beer doing construction, I would drink 6-12 beers a day but now I only drink a few a week". No recreational drug use noted.

Admission Assessment

Chief Complaint (2 points): Shortness of breath

History of present Illness (10 points): On October 21st a 78 year -old, distressed, male presented to the OSF ED with shortness of breath. (Location-chest) Patient stated: (Onset) "Sunday night (10/18/2020) I could not breath, it felt like I was suffocating. (characteristics) I also began coughing up clear mucus and my right shoulder started hurting" (associated manifestations). On Monday October 19th, he went to his dialysis appointment and told his physician at DaVita about his shortness of breath. He was instructed to go to the hospital. He arrived at the ED on Wednesday October 21st. His bloodwork showed elevated troponin I levels. He was admitted on 10/21/2020. The patient stated: "My shortness of breath was constant

(Duration), and I thought I had COVID". The patient took a hot shower and applied a heating pad to help with his shoulder pain which helped a little (Relieving factors). Patient stated: "I had shortness of breath last winter which ended up being pneumonia, I was in the hospital a few days and recovered shortly after". (Treatment)

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Acute Chronic Heart Failure

Secondary Diagnosis (if applicable):

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

Heart failure is a disease that occurs when the heart is unable to provide sufficient blood circulation to the tissues throughout the body (Capriotti, 2020). The heart is also unable to handle the blood that returns from the veins throughout the body (Kemp & Conte, 2012). There are several different ways to describe heart failure such as: acute, chronic, systolic, diastolic, high-output, low-output, left ventricular failure, and right ventricular failure (Capriotti, 2020). Acute heart failure describes a sudden failing heart due to ventricular muscle injury such as during a heart attack (MI) (Capriotti, 2020). Chronic heart failure is the gradual weakening of the heart over an extended period. (Capriotti,2020). Systolic heart failure is caused by a weakened left ventricle that struggles to get blood out of the chamber, causing it to back up into the lungs (Capriotti, 2020). Diastolic heart failure is caused by the left ventricle's inability to relax, which prevents it from filling with blood (Capriotti, 2020). In Diastolic heart failure, the body cannot send out enough blood to meet the body's needs. High output failure causes the ventricle to fail due to an increased demand for blood from the tissues (Capriotti, 2020). High-output failure can

be caused by certain conditions that cause the body to produce more blood such as anemia or Paget's disease (Capriotti, 2020). Low-output failure is caused by poor blood output by the heart due to poor blood return by the veins. Left ventricular failure is caused by an increased resistance that the left ventricle must overcome to get blood out of the heart (Capriotti, 2020). This causes the left ventricle to hypertrophy or enlarge and stiffen, preventing it from filling with blood (Capriotti, 2020). With LVF, blood backs up in the left atrium causing fluid to back up into the lungs. Right ventricular failure occurs due to a weak right ventricle. The right ventricle cannot pump blood out of the heart. As a result, the blood backs up into the right atrium which causes fluid to back up into the body. Heart failure is caused by injury to the myocardium which is the muscular layer of the heart that contracts so that blood can be pumped throughout the body (Kemp & Conte, 2012).

Several factors contribute to damaging the myocardium but the main three are ischemic heart, chronic hypertension, and chronic pulmonary disease (Capriotti, 2020). Ischemic heart disease is caused by poor blood circulation in the coronary arteries. Ischemic heart disease causes repeated damage to the myocardium resulting in scarred muscle tissue which diminishes the heart's ability to contract (Capriotti, 2020). Chronic hypertension (high blood pressure) causes LVF due to increased pressure in the aorta which requires the heart to work harder to get blood out of the heart (Capriotti, 2020). As a result, the left ventricle hypertrophies. Chronic pulmonary (lung) diseases such as COPD cause poor blood oxygenation which creates high pulmonary artery pressure (Capriotti, 2020). This increased pulmonary pressure creates an increased workload for the right ventricle, causing it to enlarge (Capriotti, 2020). Heart failure can also be caused by irregular heart rhythms, heart infections, a blood clot in the lungs, or heart

valve abnormalities such as narrowing (stenosis) or regurgitation (not closing completely). In the United States, over 6.5 million people have heart failure (Capriotti,2020).

Those at risk of developing heart failure are African Americans, people over the age of 65, those with a history of coronary artery disease, heart attack, or diabetes, smokers, people that are obese, those with a family history of it, those that live an inactive life, and patients with kidney conditions such as WA which causes high blood pressure (Capriotti, 2020). WA's kidney failure caused chronic hypertension which has caused his left ventricle to enlarge, his aortic valve to narrow and not close properly, and his tricuspid valve to not close properly. These factors contributed to his heart not being able to supply adequate blood to his tissues.

The signs and symptoms of heart failure depend on which side is failing. Left ventricular failure causes shortness of breath (WA has), a productive cough (WA has), waking up at night unable to breathe, difficulty breathing while lying down, and weak pulses in the extremities (Capriotti, 2020). Right-sided heart failure causes pronounced jugular veins in the neck, fluid accumulation on the abdomen, swelling of the extremities, an enlarged liver, and GI disturbances (Capriotti, 2020).

Heart failure is diagnosed by Brain Natriuretic Peptide levels greater than 500, blood electrolyte levels such as depleted sodium, potassium, and chloride which WA has, a chest X-ray which can identify an enlarged heart and its components such as the left ventricle both of which WA has, an echocardiogram which identifies enlarged heart components as well as valve abnormalities which is how WA's were discovered, and a cardiac catheter which measures the pressure of blood in the heart (Capriotti, 2020).

Heart failure is treated by lifestyle modifications such as adopting a low-sodium diet, taking certain medications such as diuretics, ACE inhibitors, angiotensin II receptor blockers

(WA is currently on), nitrates, beta-1-adrenergic blockers (WA currently takes), inotropics, and arterial vasodilators (WA is currently taking) (Capriotti, 2020). Treatment for advanced heart failure includes an intra-aortic balloon pump which opens the clogged coronary arteries, an LVAD which helps the left ventricle eject blood, and heart transplant (Capriotti, 2020).

Pathophysiology References (2) (APA):

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

Kemp, C. D., & Conte, J. V. (2012). The pathophysiology of heart failure. Cardiovascular Pathology, 21(5), 365-371. https://doi.org/10.1016/j. carpath.2011.11.007

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

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	**4.4-5.80**	**3.47**	**3.50**	Patient has kidney failure which reduces the production of erythropoietin which regulates RBCs. Patient also takes losartan which blocks the production of erythropoietin (Tang & Katz, 2006).
Hgb	**13.0-16.5**	**10.9**	**10.8**	Patient has kidney failure which reduces the production of RBCs (Androne et al, 2003).
Hct	**38-50**	**32.9**	**33.1**	Heart failure causes reduced cardiac output (Capriotti, 2020). Patient also has kidney failure which reduces the

				volume of RBCs (Androne et al, 2003).
Platelets	**140-440**	**276**	**286**	
WBC	**4.00-12.00**	**7.40**	**6.40**	
Neutrophils	**40-60**	**76.7**	**70.9**	Heart failure causes inflammation of endothelial tissue which initiates a chronic immune response. Neutrophils are responsible for responding to inflammation (Tracchi et al, 2009).
Lymphocytes	**19-49**	**8.9**	**12.8**	Lymphocytopenia is common in patients with heart failure due to prolonged inflammation which causes the programmed cell death of lymphocytes (Serrano et al, 2019).
Monocytes	**3.0-13.0**	**11.6**	**12.5**	
Eosinophils	**0.0-8.0**	**2.2**	**3.1**	
Bands				

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal
Na-	**133-144**	**138**	**136**	
K+	**3.5-5.1**	**4.3**	**4.3**	
Cl-	**98-107**	**100**	**97**	Heart failure causes excess release of vasopressin (anti-diuretic hormone) which causes increased water retention in the blood which reduces electrolyte levels (Tello, 2020).
CO2	**21-31**	**23**	**27**	
Glucose	**70-99**	**86**	**84**	
BUN	**7-25**	**42**	**28**	My patient has kidney failure, which prevents the kidneys from filtering out nitrogenous waste products

				(Capriotti, 2020).
Creatinine	**0.50-1.20**	**7.29**	**5.50**	My patient has kidney failure which prevents the glomerulus from filtering creatine. (Capriotti, 2020).
Albumin	**3.5-5.7**	**4.2**	**n/a**	
Calcium	**8.6-10.3**	**8.8**	**8.8**	
Mag	**1.6-2.6**	**n/a**	**2.0**	
Phosphate	**n/a**	**n/a**	**n/a**	
Bilirubin	**n/a**	**n/a**	**n/a**	
Alk Phos	**34-104**	**104**	**n/a**	
Troponin I	**0.000-0.040**	**0.070**	**0.071**	Elevated troponin levels indicate injury to cardiac cells. It is elevated in patients with heart failure due to heart damage (“Troponin”, 2020).

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			**n/a**	**Urinalysis was not ordered for this patient.**
pH			**n/a**	
Specific Gravity			**n/a**	
Glucose			**n/a**	
Protein			**n/a**	
Ketones			**n/a**	
WBC			**n/a**	
RBC			**n/a**	
Leukoesterase			**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	**n/a**	**n/a**	**n/a**	
Blood Culture	**Negative**	**Negative**	**n/a**	
Sputum Culture	**n/a**	**n/a**	**n/a**	
Stool Culture	**n/a**	**n/a**	**n/a**	

Lab Correlations Reference (APA):

Lab correlations collected from EMR.

Androne, A.-S., Katz, S. D., Lund, L., LaManca, J., Hudaihed, A., Hryniewicz, K., & Mancini, D. M. (2003). Hemodilution is common in patients with advanced heart failure. Circulation, 107(2), 226-229. https://doi.org/10.1161/01.CIR.0000052623.16194.80

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

Serrano, C. V., de Mattos, F. R., Pitta, F. G., Nomura, C. H., de Lemos, J., Ramires, J. A. F., & Kalil-Filho, R. (2019). Association between neutrophil-lymphocyte and platelet-lymphocyte ratios and coronary artery calcification score among asymptomatic patients: Data from a

cross-sectional study. Mediators of Inflammation, 2019, 1-8. https://doi.org/10.1155/2019/6513847

Tang, Y.-D., & Katz, S. D. (2006). Anemia in chronic heart failure. Circulation, 113(20), 2454-2461. https://doi.org/10.1161/CIRCULATIONAHA.105.583666

Tello, C. (2020, January 29). Low chloride levels (hypochloremia) symptoms & causes. Selfhacked. https://selfhacked.com/blog/low-chloride-levels-hypochloremia/

Tracchi, I., Ghigliotti, G., Mura, M., Garibaldi, S., Spallarossa, P., Barisione, C., Boasi, V., Brunelli, M., Corsiglia, L., Barsotti, A., & Brunelli, C. (2009). Increased neutrophil lifespan in patients with congestive heart failure. European Journal of Heart Failure, 11(4), 378-385. https://doi.org/10.1093/eurjhf/hfp031

Troponin. (2020, August 12). AACC Lab Tests Online. https://labtestsonline.org/tests/troponin

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Blood culture was done on 10/21/20. Results were negative. No bacterial growth within 24 hours.

A single frontal chest x-ray was done of the patient's heart, which showed that the heart is "Borderline with pulmonary vascular congestion changes". No pulmonary edema was observed. Impression: "Incipient Congestive Heart Failure is present".

Echocardiogram was done on Thursday October 22nd, it revealed: mitral valve calcification, moderate stenosis and regurgitation of the aortic valve, mild tricuspid regurgitation, severely enlarged atria, a severely enlarged left ventricle, and an ejection fraction of 50%.

EKG results- Atrial rate 71 beats per minute. QRS- 102. QTC calc- 480. Q-T Duration- 442. R-axis- -6. T- 108. P-49. P-R- 150. Ventricle rate is 71 beats per minute.

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/ Generic	Cozaar/ Losartan potassium	Amlodipine besylate/ Norvasc	Atorvastatin calcium/ Lipitor	Doxazosin mesylate/ Cardura	Hydralazine hydrochloride/ Apresoline (CAN)
Dose	50 mg	10 mg	10 mg	4 mg	50 mg
Frequency	Twice daily	Once daily	Once daily	Once daily	Three times daily
Route	Oral	Oral	Oral	Oral	Oral
Classification	Antihypertensive	Antihypertensive	Antihyperlipidemic	Antihypertensive	Antihypertensive
Mechanism of Action	Blocks binding of angiotensin II to receptor sites in many tissues, the adrenal gland, and vascular smooth muscle. Inhibition of angiotensin II reduces	Binds to dihydropyridine and nondihydropyridine cell membrane receptor sites on myocardial and vascular smooth-muscle cells and inhibits calcium ions from crossing calcium	Reduces plasma cholesterol by inhibiting cholesterol synthesis in the liver and increasing LDL receptors which enhance the uptake and breakdown of LDL.	Inhibits alpha1-adrenergic receptors in SNS, causing peripheral vasodilation and reduces peripheral vascular resistance. This reduces BP, especially	May act in a manner that resembles organic nitrates and sodium nitroprusside, but hydralazine is selective for arteries. It dilates the arteries which increases

	blood pressure. It also decreases left ventricular mass index in patients with left ventricular hypertrophy.	channels. This decreases calcium levels and inhibits contraction of coronary and vascular smooth muscles which decreases blood pressure.		when the patient stands.	cardiac output. It also causes reflex autonomic response that increases cardiac output, HR, and LVEF.
Reason Client Taking	Control hypertension	Control hypertension	To reduce the risk of cardiovascular events such as angina, or MI. To reduce hospitalization for CHF for patients with coronary heart disease.	Manage hypertension	Treat HF
Contraindications (2)	Concurrent aliskiren therapy in patients with renal impairment, hypersensitivity to losartan or its components.	Hypersensitivity to amlodipine or its components.	Active hepatic disease, hypersensitivity to atorvastatin or its components, unexplained persistent rise in serum transaminase level.	Hypersensitivity to doxazosin, prazosin, terazosin, or their components.	Coronary artery disease, hypersensitivity to hydralazine or its components, mitral valve disease
Side Effects/ Adverse Reactions (2)	Hypotension, back pain, leg pain, insomnia, diarrhea	Arrhythmias, chest pain, hypotension, palpitations	Arrhythmias, elevated serum CK levels, orthostatic hypotension, phlebitis	Arrhythmias, first-dose orthostatic hypotension, palpitations, peripheral edema	Angina, edema, orthostatic hypotension, tachycardia

Medications Reference (APA):

2020 Nurse's drug handbook (Nineteenth edition. ed.). (2020). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Appears alert and oriented X3. No acute distress noted. Well-groomed (bath given prior, was unkept)
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 Pink Dry, normal Warm Normal, 2+ None 1 on Right arm at IV port site. Fistula present on left forearm. 22, deducted 1 for reduced activity. Patient is independent but can only walk a short distance before he gets winded. He spends most of his time in his bed or chair.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Head and neck symmetrical, normal hair distribution. Trachea is midline, no deviation noted. No lymphadenopathy in the head or neck noted. Thyroid is not palpable. Ears pink, no tenderness or drainage. No hearing deficit

	observed. PERRLA bilaterally, EOMs intact bilaterally. Eye lids pink and symmetrical. Bilateral Sclera white, Bilateral cornea clear, Bilateral conjunctiva pink without discharge. Patient uses reading glasses. Septum midline, nares free of discharge. Patient has his own teeth, but they are discolored. Patient is missing several teeth. Throat pink, moist, and without ulcers. Tonsils 1+.
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:**	Clear S1 and S2 heart sounds. No audible murmur, gallops, or rubs. Radial, ulnar, and brachial pulses 2+ bilaterally. Popliteal, posterior tibial and dorsalis pedis pulses 3+ bilaterally. Posterior tibial artery pulsation is visible in left leg. Capillary refill less than 3 seconds.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Breath sounds even, regular and nonlabored bilaterally. No crackles, wheezes or rhonchi noted. Patient is receiving oxygen through nasal cannula PRN.
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:**	Low- Sodium Cardiac 5’8’ 126 lbs. Normoactive in all 4 quadrants. This morning, twice. Patient described as soft and brown. Abdomen soft, nontender to palpation. No masses or distention inspected or palpated. No incisions, visible scars or wounds noted.
GENITOURINARY:	

Color: **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☒ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Patient reports urine is yellow and clear, without odor. He also stated that he is "urinating normally". He voided twice during my shift. Patient receives dialysis three times a week. He goes to dialysis on Monday, Wednesday, and Friday. He received dialysis Wednesday at the hospital.
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**☐	No neurovascular deficits noted. Normal ROM. Equal strength in upper and lower extremities, no weakness observed. Patient is independent, does not use assistive devices. Patient went to the bathroom twice and went to the sink to brush his teeth without assistance. Fall risk score 0, no fall history, IV, cognitive impairment, or assistive devices needed. (used Morse Fall Scale)
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Appears alert and Oriented to person, place, and time. Cognitive with normal speech. Normal sensory response in fingers and toes. No neurological deficits noted. Patient reports no episodes of losing consciousness.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Patient enjoys reading, discusses troubles with his spouse. Normal developmental level. Catholic, attends church often Patient spends time his wife, brother, and friends. Reports healthy relationships. Patient received 4 phone calls inquiring about his status while performing morning care.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen

0730	**66 (right radial)**	**147/86 (RA)**	**18**	**97.5 (temporal)**	**96% pulse ox. Patient was receiving oxygen through nasal cannula.**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1240	**Numerical 0-10**	**Shoulder**	**2**	**Sharp**	**Placed a pillow behind his back to increase comfort.**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
240 ml of coffee (black, no cream/sugar) **360 ml of water (Patient drank ½ of his 24 oz cup of water)** **Patient ate 100% of his muffin, 90% of his omelet, 90% if his oatmeal** **75% of his cheeseburger**	**Patient urinated twice and had 2 bowel movements during my shift.**

100% of his bag of chips	

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Decreased gas exchange related to congestion or fluid in the lungs at the alveolar-capillary membrane evidenced by patient's shortness of breath and productive cough (Swearingen & Wright, 2020).	**"**I felt like I was suffocating, and I began coughing up clear mucus".	1.Administer oxygen as ordered and Monitor pulse oximetry. Report significant findings (Swearingen & Wright, 2020). 2.Assess respiratory rate, use of accessory muscles, air hunger, changes in HR or Bp and report significant findings (Swearingen & Wright, 2020).	Goal met- Nurse administered oxygen via nasal cannula. Patient stated: "I am breathing much better than before". Vitals were assessed at 0730, patient's oxygen saturation was 96%. Goal met- Patient's vitals were taken at 0730, his blood pressure although high, was consistent with his previous values. His RR and pulse were within the normal range. I visually inspected the patient at 0730 and 1220, no signs of distress, air hunger, or use of accessory muscles.
2.Fluid overload related to compromised regulatory mechanisms occurring with	Patient has a hypertrophied left ventricle and defective heart valves which result	1.Auscultate lungs for crackles or wheezing which indicates fluid in the lungs. Note	1. Goal met- I auscultated AW's lungs at 1240, they were regular, even, and non-labored bilaterally. No crackles or wheezes

decreased cardiac output evidenced by shortness of breath and a productive cough. (swearingen & Wright, 2020).	in decreased blood being ejected out of the heart. As a result, fluid backs up into the lungs causing a productive cough and dyspnea. Heart failure causes fluid retention in the lungs and body.	sputum color and productivity. 2. Assess for fluid on the abdomen. Assess for edema in the legs, ankles, and feet.	heard. Patient stated: "When I cough, my mucus is clear". 2. Goal met- Patients abdomen, legs, ankles, and feet were assessed at 0740 and 1240. No edema inspected or palpated. No fluid on abdomen palpated.

Other References (APA):

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

Concept Map (20 Points):

Subjective Data

"Sunday night I could not breath, it felt like I was suffocating. I also began coughing up clear mucus and my right shoulder started hurting".
"My shortness of breath was constant, I thought I had COVID".
"I had shortness of breath last winter which ended up being pneumonia, I was in the hospital a few days and recovered shortly after".
"My shoulder pain is about a 2. It feels sharp".
"I smoke a few a day. I've smoked for 60 years but I'm trying to quit"

Nursing Diagnosis/Outcomes

Decreased gas exchange related to congestion or fluid in the lungs at the alveolar-capillary membrane evidenced by patient's shortness of breath and productive cough (Swearingen & Wright, 2020).

Outcomes- Within 30 minutes of tx/interventions the patient will have adequate gas exchange as evidenced by an oxygen saturation percentage between 95-100.

Fluid overload related to compromised regulatory mechanisms occurring with decreased cardiac output evidenced by patient's shortness of breath and productive cough (swearingen & Wright, 2020).
Outcomes: Within 1 hour of treatment, the patient will demonstrate less shortness of breath. Lung sounds will remain free of crackles.

Objective Data

Single frontal chest x-ray shows CHF
Echocardiogram shows mitral valve calcification, aortic stenosis and regurgitation, tricuspid regurgitation
Dx- Acute chronic heart failure
BP-147/86 (RA)
Temperature- 97.5 (temporal)
Pulse- 66
RR-18 breaths per minute
Oxygen saturation- 96% (pulse ox)
Visible posterior tibial pulsations left leg
Troponin I- 0.070
RBC- 3.50 (low) neutrophils-70.9 (high)
Hgb- 10.8 (low) Lymphocytes- 12.8 (low)
Hct- 33.1 (low)

Patient Information

78 y.o Caucasian male with a hx of hypertension and kidney failure presented to the ED on 10/21/20 complaining of shortness of breath

Nursing Interventions

Administer oxygen as ordered and Monitor pulse oximetry. Report significant findings (Swearingen & Wright, 2020).

Assess respiratory rate, use of accessory muscles, air hunger, changes in HR or Bp and report significant findings (Swearingen & Wright, 2020).

Auscultate lungs for crackles or wheezing which indicates fluid in the lungs. Note sputum color and productivity.

Assess for fluid on the abdomen. Assess for edema in the legs, ankles, and feet.