

Firelands Regional Medical Center School of Nursing  
AMSN 2024  
Unit 6: Heart Failure online assignment (1.5H)

Directions:

- Read Lewis Chapter 38, review ATI Pharmacology Made Easy 4.0: Cardiovascular Module: Drug Therapy for Heart Failure, and review the Unit 6 Pharmacology List.
- Utilizing the resources above, complete the case study. There will be many items for each question.
- Utilizing the Pharmacology List and ATI/Skyscape, complete three ATI Medication Templates from the Pharmacology List.
- This assignment is due in the Unit 6: HF assignment drop box by March 11, 2024 at 0800.
- Be prepared to discuss this assignment in class.
- You must complete the assignment in full to receive the 1.5H theory credit.

Assignment Objectives:

- Determine overall goals in the treatment of heart failure.

**CASE STUDY:**

Frannie Failure, a patient on 4P, calls the nurse and states, "I feel really puffy. My rings feel so tight on my fingers and I am having trouble catching my breath." The patient is lying flat in the bed and is alert and oriented x 3. Normal saline 0.9% @ 125mL/HR is running.

Assessment:

- Vital Signs: T 97.9 oral, HR 120, RR 24, SpO2 86% RA, BP 152/94, pain 0/10.
- Respiratory: Lung sounds- crackles throughout bilaterally, non-productive cough.
- Cardiac: Heart sounds- S3, pedal pulses not palpable, 3+ pitting edema bilateral feet and ankles.
- Skin intact, pale and cool.
- Gastrointestinal: Bowel sounds x4 WNL, BM yesterday morning.
- Intake/Output: Patient has had 900ml in and 200ml out over the last 8 hours.

**1. What additional information would you want/need to know?**

**Are they NPO or are they eating.** If they are eating, what have they eaten/drunk in the last 24 hours. Do they have any cultural implications that affect their diet? Do they have a history of heart failure? What other past medical history do they have? (Cardiomyopathy, CAD, MI, HTN, hyperthyroidism, myocarditis, pulmonary HTN, rheumatic heart disease, valve disorders??) What family history do they have? Any recent illnesses or needing to be on antibiotics in the past month? Are they a smoker or dependent on any drugs or alcohol? What is their ejection fraction? Were the pedal pulses palpable when they came in or is this a new occurrence? What is the patients renal status like, and what home medications are they on?

**2. What assessment/ interventions would be appropriate for this patient?**

**Intervention:** I would stop the normal saline from running. Apply oxygen 2L per nasal cannula and titrate to maintain an Spo2 above or at 92 %. I would also assess their jugular vein to see if that is distended or not. I would also want to get a doppler and try to doppler the pedal pulses. I would want to assess the abdomen of potential ascites. Due to s3 heart sounds I would want to get this patient on a heart monitor and take an ecg.

**3. What would you anticipate the healthcare provider to order?**

I would anticipate the HCP to want to stop the fluids currently running.

Order oxygen 2L NC to keep spo2 at or above 92% and titrate as needed.

I would also anticipate the HCP to order and IV diuretic to help offload some of the fluid.

The HCP might also order some morphine to help dilate the pulmonary and systemic blood vessels to relieve symptoms such as dyspnea.

A possible chest xray to see the amount of fluid in the lungs/ rule out other possibilities.

Order for a positive inotrope such as dobutamine or dopamine to improve cardiac output and help reduce the s3 sounds by reducing filling pressures.

Diagnostic tests to be done to check their serum electrolyte levels (especially NA and K), BUN and creatinine level. BNP level.

Echocardiogram to determine if there is increased chamber size, decreased wall motion, decreased LVEF or normal LVEF with evidence of diastolic dysfunction)

**4. What medications would be appropriate for this patient (include all pertinent from the Pharmacology List) ? Doses? Nursing Interventions? You will pick three of these medications to complete the ATI Medication Templates.**

-Bumetanide or furosemide. (reduce fluid volume)

-Morphine. (dyspnea relief)

-Lisinopril, Captopril or enalapril. (prevent remodeling of the heart)

-isosorbide or nitroglycerin (dyspnea relief)

-Dobutamine, dopamine

**5. What patient education would you include?**

How to reduce sodium in their diet and what daily amount of sodium is recommended for them. The importance of medication adherence. Also, salt substitutes are often high in potassium so if they are on a potassium sparing diuretic they must watch and be mindful of that. S/S to watch out for worsening conditions. Make sure they take a daily weight and follow up with their health care provided. Their activity level might also be different now that what they are used to, so check with their HCP before beginning a new workout. This also goes along with any over-the-counter medications or supplements as they could have adverse effects unknown to them, so just check with their HCP before starting them. I would also want to educate them on how to measure their blood pressure correctly and to keep a daily journal of their BP measurements.