

Firelands Regional Medical Center School of Nursing
AMSN 2023
Unit 6: Heart Failure online assignment (1.5H)

Directions:

- Read Lewis Chapter 34, 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 13, 2023 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. NS @ 125mL/HR 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.

1. What additional information would you want to know?

- I would like to know the patient ejection fraction. If the patient is on oxygen. Why the patient is given IV fluids when they seem to be in fluid overload. I would like to see the patient on oxygen and fluid restrictions and sodium restrictions

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

- I would assess the patient's breath sounds and make sure the patient was on oxygen to keep them. I would review the patient's medication and over-the-counter medications. I would want to review the patient's dietary habits to identify issues Related to an exacerbation.

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

- I would anticipate the healthcare provider a fluid restriction and a set sodium diet. I would anticipate a diuretic to be given the CHF patient. Since the patient is tachycardic, I would expect a calcium channel blocker or a beta blocker to lower the blood pressure and heart

rate. Maybe an activity regimen too. This would help with cardiac rehabilitation. I would maybe have the patient take rest periods when they are doing activities.

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.

I would say that Beta Blockers: metoprolol succinate: dosing for metoprolol is to start with 25 mgPO x 2weeks for heart failure patients and 12.5 mg PO qd in severe heart failure patients. For nursing interventions: Monitor heart rate and report rate slower than 60 beats/minute (or prearrange parameter) to provider, Monitor for signs of heart failure and report to provider , Teach client not to stop beta blocker suddenly, On discontinuation, taper dose slowly over 1 to 2 weeks. This helps lower blood pressure and heart rate.

Ace Inhibitors: captopril, start dosing at 12.5-25mg PO bid-tid, max 450 mg/day. For nursing interventions: Start ACE inhibitors with low dose and gradually increase to prevent hypotension

- Diuretics may be temporarily stopped before first dose of ACE inhibitor is given
- Monitor BP following first dose
- Manage severe hypotension by expanding blood volume with IV fluid therapy
- Monitor for and report dry cough
- Discontinue use of ACE inhibitor if dry cough occurs
- Monitor for and report these effects (ACE inhibitor may be discontinued)
- Treat severe angioedema with IV epinephrine
- Discontinue use of any ACE inhibitor if angioedema occurs
- Monitor potassium levels in clients who are at risk (See interactions, below)
- Monitor white blood cell counts (WBC) with differential (includes number of neutrophils and other types of white blood cells) every 2 weeks for first 3 months of therapy and then periodically. This helps lower blood pressure and heart rate.

Furosemide: doing starts at 20-80mg PO x1 may increase 20 -40 q8-8 hrs or until desired response. Max 600mg/day. For nursing interventions: Monitor serum electrolyte levels periodically; notify provider for abnormal levels

- Monitor carefully for signs of electrolyte imbalance
- If hypokalemia occurs, monitor for cardiac dysrhythmias
- If hypokalemia is a risk (e.g., client also taking digoxin) furosemide can be combined with a potassium-sparing diuretic
- Monitor blood pressure frequently during treatment
- Ensure that the client does not take other ototoxic drugs (additive effect)
- Monitor for hearing loss, tinnitus, and vertigo
- Monitor blood glucose periodically in all clients
- Monitor blood glucose more frequently in clients who have diabetes mellitus; insulin or oral antidiabetic drug dosage can need to be increased
- Monitor uric acid levels periodically. This helps pull fluid off the lungs and interstitial space.

5. What patient education would you include?

- I would talk about sodium/salt restriction and fluid restriction, if patient is in fluid overload. I would also talk about cardiac rehabilitation. Teach after exertion, plan a rest period. Avoid emotional upsets. Consider working shorter hours or schedule rest period during working

hours. Take drug as prescribed. Check pulse and blood pressure at determined intervals
Know you INR and target range if taking warfarin and how often to have blood checked.