

Firelands Regional Medical Center School of Nursing
AMSN 2023 Hall
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?** Past medical history, what the patient was admitted for, labs, dietary habits, current home medications and vaccine status.
- 2. What assessment/ interventions would be appropriate for this patient?** Stopping the normal saline, implementing a fluid restriction, place O2 on the patient, weigh patient daily, vital signs hourly and position patient high fowlers.
- 3. What would you anticipate the healthcare provider to order?** Diuretic to flush out the excess fluid, chest x-ray, Ace inhibitors, echocardiogram, labs BNP, BUN and electrolytes and 12 lead ECG.

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.: Separate medication templates attached to

Ace Inhibitors: captopril, lisinopril, enalapril:

Dosing:

- Captopril: PO 25 mg 3xdaily; Titrate to target dose of 50 mg 3xdaily (Max=450mg/day)
- Lisinopril: PO 5 mg once daily may be titrated every 2 weeks up to 40 mg/day.
- Enalapril: PO 2.5 mg 1-2 times daily; titrated up to target dose of 10 mg twice daily

Nursing Interventions:

- Start with low dose & slowly increase.
- 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 or angioedema occurs
- Treat severe angioedema with IV epinephrine
- Monitor potassium levels in clients who are at risk
- Monitor white blood cell counts every 2 weeks for first 3 months of therapy and then periodically

Metoprolol

Dosage: PO 12.5-2 mg once daily (extended release), can be doubled every 2 weeks up to 200 mg/day

Nursing interventions:

- Monitor heart rate and report rate slower than 60 beats/minute
- Monitor for signs of heart failure and report to provider
- Teach client not to stop beta blocker suddenly
- Taper dose slowly over 1 to 2 weeks

Digoxin

Dosage: Maintenance dose of 0.125 to 0.5 mg once a day will be given depending on body weight

Nursing interventions:

- Vomiting can cause hypokalemia (↑ risk for digoxin toxicity)
- Monitor for and report GI symptoms
- Monitor for and report CNS effects
- Take apical pulse for 1 full minute before administering digoxin; withhold drug if pulse falls below prescribed parameters (such as 60/ min in adults)
- Monitor digoxin levels & serum potassium levels
- Monitor cardiac rhythm and treat dysrhythmias per protocol
- For severe digoxin toxicity, digoxin immune FAB (Digibind) is administered IV as an antidote to neutralize digoxin

Dobutamine, Dopamine

Dosage:

- Available for IV infusion only
- IV: 2.5-15 mcg/kg/min; titrate based on response (Max dose =40 mcg/kg/min)

Nursing interventions:

- Monitor ECG rhythm and vital signs continuously during
- Treat cardiac dysrhythmias as needed and prepare to decrease.
- Monitor I & O's
- Palpate peripheral pulses.
- Monitor K+ levels

Furosemide, bumetanide

- Dosage: Available for oral, IM, or IV use
- Give IV form undiluted; administer slowly to prevent ototoxicity
- PO: 20-80 mg/day
- IM, IV: 20-40 mg may repeat 1-2hr and ↑ by 20 mg

Nursing interventions:

- Monitor serum electrolyte levels
- Monitor for cardiac dysrhythmias.
- Monitor blood pressure
- Monitor for hearing loss, tinnitus, and vertigo
- Monitor blood glucose
- Monitor uric acid levels

Milrinone

Dosage:

- Available for IV infusion only
- Give a loading dose over 10 minutes then continuous IV
- Loading dose: 50 mcg/kg followed by continuous infusion 0.5 mcg/kg/min

Nursing interventions:

- Correct fluid deficits and hypokalemia before beginning
- Monitor potassium levels
- Monitor vital signs and ECG rhythm continuously
- Decrease dosage for dysrhythmias

Spironolactone

Dosage: PO 25 mg every other day, suspension 10 mg once daily

If development of hyperkalemia decrease dose

Nursing interventions:

- Monitor for signs of hyperkalemia
- Monitor periodic potassium levels, BUN and creatinine in clients at risk for hyperkalemia.

5. What patient education would you include?

Increase physical activity level, lessen sodium in diet, weigh yourself daily, eat small frequent meals, avoid extreme hot or cold temperatures during physical activity, report signs and symptoms to the HCP, obtain annual flu vaccine, plan rest periods following physical activity and take medication as prescribed.