

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.
- This assignment is due in the Unit 6: HF assignment drop box by March 13, 2023 at 0800.

**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?**

Additional information I would like to know is:

- Patient's health hx
- Change in the patient's neurological status? Confused? Decreased memory? Restlessness?
- Serum electrolytes
- Fatigued?
- Weight changes?
- Palpitations?

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

Assessment/interventions that would be appropriate for this patient are:

- Stopping the NS that's running at 125mL/hr
- High fowlers
- Oxygen therapy
- Administer medication

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

I would anticipate the healthcare provider to order:

- a liver function test
- labs: serum electrolytes, BUN, creatinine, BNP, NT-proBNP
- Chest x-ray
- 12-lead ECG
- Stress test

- Cardiac catheterization
  - Echocardiogram
  - O2 via NC
  - Diuretics
  - Daily weights
  - Sodium and possibly fluid restricted diet
  - Strict intake and output
  - Continuous heart monitor
- 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.**

Appropriate medications for this patient would be

- ACE inhibitors: captopril, lisinopril, enalapril – relieve HF symptoms, improve renal blood flow, vasodilator
  - PO 5 mg x once daily
  - Weigh patient, assess pt routinely for resolution of fluid overload (edema, crackles, dyspnea, weight gain, jugular venous distention)
  - Monitor BUN, creatinine, electrolyte levels
- ARBs: losartan, valsartan - relieve HF symptoms, improve renal blood flow, vasodilator
  - 25-100 mg/day
  - Assess orthostatic BP, pulse frequently during initial dose and periodically during therapy
  - Monitor for angioedema
  - Monitor renal function
- Digoxin – increase CO, vasodilator
  - PO 0.75-1.5 mg initially
  - PO 0.125-0.5 maintenance
  - Monitor apical pulse for 1 full minute before administration
  - Monitor VS
  - Monitor I's&O's and daily weights
  - Monitor serum electrolytes
  - Monitor for toxicity: abdominal pain, anorexia, N/V, visual disturbances, bradycardia
- Dobutamine, dopamine – increases contractility, increase CO, increases BP, and improves renal blood flow
  - IV 1-5mcg/kg/min
  - Monitor BP, HR, pulse pressure, ECG, urinary output
  - Palpate peripheral pulses and assess appearance of extremities
- Entresto – reduction in cardiovascular death and hospitalization in HF
  - PO 24-26 mg x2 daily initially
  - Monitor VS, daily weight, assess for angioedema

- o Monitor renal function
- Diuretics: Furosemide, Bumetanide
  - o PO 20-80 mg/day
  - o Monitor electrolytes
  - o Monitor for skin rash (allergy)
  - o Monitor VS, edema, daily weight
  - o Assess pt if taking digoxin as well – electrolyte imbalance
  - o Monitor hydration status
- Spironolactone – potassium-sparing diuretic
  - o PO 25 mg/day
  - o Monitor electrolytes
  - o Monitor for skin rash (allergy)
  - o Monitor VS, edema, daily weight
  - o Assess pt if taking digoxin as well – electrolyte imbalance
  - o Monitor hydration status
- Hydrochlorothiazide – thiazide diuretic
  - o PO 12.5-100 mg/day
  - o Monitor electrolytes
  - o Monitor for skin rash (allergy)
  - o Monitor VS, edema, daily weight
  - o Assess pt if taking digoxin as well – electrolyte imbalance
  - o Monitor hydration status
- Nesiritide – vasodilator
  - o IV 2 mcg/kg bolus followed by 0.01 mcg/kg/min q3hr
  - o Obtain hx to reactions to recombinant peptides
  - o Monitor VS, daily weight, intake and output
- Morphine sulfate – vasodilation
  - o IV 4-10 mg q3-4hr
  - o Assess LOC, BP, HR, RR
  - o Assess bowel function
  - o Assess risk for opioid addiction
- Milrinone – increase CO
  - o Continuous infusion 0.5 mcg/kg/min
  - o Monitor EKG during infusion (arrhythmias)
  - o Monitor VS, daily weight, intake and output
- Beta Blockers: metoprolol succinate, carvedilol, bisoprolol – promotes reverse remodeling, inhibit SNS, decrease afterload
  - o PO 6.25 mg twice daily
  - o Monitor VS, daily weight, intake and output

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

Patient education I would include:

- Adherence to a low-sodium diet
- Weigh yourself at the same time everyday preferably in the morning wearing similar clothes
- Eat small, frequent meals
- Increase walking and activity gradually and be sure no fatigue and dyspnea occur
- Plan rest periods following exercise and ADL's
- Avoid extreme temperatures
- Avoid emotional upsets
- Obtain annual influenza and pneumococcal vaccines
- Develop a plan to reduce BP
- Take each drug as prescribed
- Signs of worsening symptoms such as increasing dyspnea, cough, weight gain, orthopnea, edema, fluid retention, fatigue, and tiredness of physical activity.