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**?
    a. how much IV fluid has the patient received, how long have the fluids been running?
        i. of the I&Os is the 900mL including any IV fluid, or is it PO?
    b. Pt daily weights and trends
    c. How long has the patient had low oxygen? How long have they had an abnormal respiratory assessment
        i. Are they at risk for acid-base imbalances?
    d. Is the patient on a diuretic?
        i. Home medications taken, do they take a diuretic at home?
    e. Recent lab work, especially Na+
    f. Patient history (MI, HTN, dysrhythmia)
2. **What assessment/ interventions would be appropriate for this patient?**

a. Assessment of jugular vein distention, hepatojugular reflux (physician)
b. Cardiovascular assessment, gallop rhythm S3 or S4 present? Any murmurs?
c. Assessment of Edema, fatigue, pain (especially chest pain)
d. Adjust pt to semi-fowlers, raise legs on pillows
e. Administer 02 keeping SPO2 >94%
f. Bladder Scans to make sure patient isn't retaining

3. **What would you anticipate the healthcare provider to order?**
   a. ECHO
   b. Labs: K+, Na, BNP, ABG
   c. EKG
   d. Chest XRay
   e. Strict I&O
   f. Daily weights
   g. Low Sodium Diet
4. **What medications would be appropriate for this patient (include all pertinent from the Pharmacology List) ? Doses? Nursing Interventions? <u>You will pick three of these medications to complete the ATI Medication Templates.</u>**
   a. ACE Inhibitors: captopril (25mg TID), Lisinopril (5mg once daily, may be titrated every 2 wks up to 40mg/day) , enalapril (2.5 mg 1-2 times daily, titrate to 10 mg BID)
      i. K+ levels (can cause hyperkalemia)
      ii. Heart rate, blood pressure
   b. ARBs: losartan (25mg once daily when receiving diuretics) valsartan (40mg BID, titrated up to 160 mg BID as tolerated)
      i. Heart rate, blood pressure, daily weights
      ii. Renal function, K+ levels
   c. Beta Blockers: metoprolol succinate(12.5-25 mg daily, can be double every 2 wk up to 200 mg/day), carvedilol (3.125 mg BID for two weeks up to 6.25 mg BID), bisoprolol (5mg once a day, up to 10mg once a day)
      i. Monitor heart rate and blood pressure
      ii. Assess for history of Raynaud's or asthma, contraindicated
   d. Diuretics: furosemide(20-80 mg day), bumetanide (0.5-2mg/day up to 10mg day), hydrochlorothiazide (up to 50mg/day w/htn), spironolactone (25-100mg/day)
      i. Strict I&O
      ii. Electrolyte monitoring
      iii. Blood pressure, heart rate
      iv. Kidney function
   e. Milrinone (IV bolus 50 mcg/kg followed by continuous infusion of 0.5mcg/kg/min)
      i. Monitor heart rate and BP
      ii. EKG! Arrhythmias are common
   f. Nesiritide (bolus: 2mcg/kg, continuous infusion: 0.01 mcg/kg/min, increase 0.005 mcg/kg/min every three hours for max rate of 0.03 mcg/kg/hr)
      i. Monitor HR and BP, contraindicated if SBP <100

ii. Co-sign/have another nurse verify pump settings

g. Nitrates: isosorbide (5-20 mg 2/3times a day), nitroglycerin (2.5-9mg every 8-12 hrs)
   i. Monitor BP and HR
   ii. EKG monitoring

5. **What patient education would you include?**
   a. Heart healthy, low sodium diets
   b. Fluid restrictions, if indicated at discharge
   c. Signs and Symptoms of fluid overload, when to return to hospital/ER
   d. Medication Compliance
   e. Active Lifestyles
   f. Compliance with daily weights, reporting parameters to physician.