Firelands Regional Medical Center School of Nursing
AMSN 2025
Unit 6: Heart Failure online assignment (1.5H)
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Directions:

- Read Lewis Chapter 38, review ATI Pharmacology Made Easy 5.0: 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 (see below for further details).
- This assignment is due in the Unit 6: HF assignment drop box by March 10, 2025 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**? In relation to vital signs, I would like to know her BP trends. Is 152/94 normal for her, does she have chronic hypertension, is her normal typically lower? I would also want more information regarding her oxygenation status. Does she have a history of any respiratory problems such as COPD? Does she normally wear oxygen. I would like additional information on her urine as well. How long as the retention been going on, is her urine concentrated, does she have any pain while urinating? I would like information on her labs (BUN, creatinine, BNP, CBC). I would like to know if she is on any new medications that may contribute to fluid retention.

2. **What assessment/ interventions would be appropriate for this patient?** The patient has s/s of fluid overload and respiratory distress, which indicate possible heart failure. The first intervention I would do is to sit the patient up to High Fowler's and administer oxygen. I would start at 2 L/min nasal cannula and titrate up to 4 liters if oxygen is not improving. I would stop Normal Saline 0.9% due to the fluid overload. I would reassess the patients' vital signs and apply a cardiac monitor such as telemetry. I will do a respiratory assessment and expect orders for new labs to be drawn.
3. **What would you anticipate the healthcare provider ordering?** I would expect an IV diuretic, most likely furosemide, to remove the fluid buildup. Due to the edema and fluid retention, I would expect strict intake and output. I would also expect an order for oxygen due to the low Spo2 saturation. I would expect the HCP to order cardiac medications to help with blood pressure or heart failure.
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>** Furosemide or Bumetanide would be given due to the fluid overload. Furosemide can be given at 20-40 mg IV push. Hydrochlorothiazide could also be given PO daily to reduce the body's water by increasing urine. Vasodilators such as nitroglycerin can decrease fluid buildup in the lungs, which can relieve the crackles and dyspnea the patient is experiencing. The nitroglycerin would be given at 5 mcg/min IV infusion, titrate every 5-10 minutes based on response. With Nitroglycerin it is important to assess headaches, dizziness, and hypotension. The ACE inhibitors (Lisinopril, Enalapril, or Captopril) can be given PO to reduce afterload and prevent progression of heart failure symptoms. Lisinopril can be given 2.5-5 mg PO, and Enalapril can be given 2.5-10 mg PO. With ACE inhibitors it is important to monitor for dry cough, angioedema, hyperkalemia, and low blood pressure. If the patient cannot tolerate the symptoms such as the harsh dry cough, the ARBs (Losartan and Valsartan) can also be given PO. The patient can be given Dobutamine IV 2-20 mcg/kg/min IV infusion because it is for acute decompensated heart failure. The nurse needs to monitor vitals closely, especially BP and HR.
5. **What patient education would you include?** I would provide education on their medications, their use, importance, side effects, and when to take them. I would like to educate on the importance of medication compliance. I would give diet education such as reducing sodium and fluid intake. I would educate on daily weights, and how it should be at the same time, same amount of clothes, and to report any changes. I would like to educate on monitoring extremities for swelling and symptoms of fluid overload. Follow up appointments, routine blood tests, and recognizing symptoms of worsening heart failure are also important education points. Specific symptoms include increased weight gain, swelling of extremities, SOB, fatigue or dizziness, or pink frothy sputum.