

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?

- When she started to notice her symptoms
- Are there pedal pulses with doppler?
- Is she on fluid restrictions?
- How long has the NS been running and is it ordered correctly?
- Why is the HOB flat?
- Has she taken any medications today and what are they?
- Does she have any standing orders for Lasix?
- What is the patient's history and diagnosis for this stay?
- Age, ethnicity

- Is the S3 from left sided heart failure?
 - Is she having any chest pain or palpitations?
 - What are her ABGs and what did her last CXR show
- 2. What assessment/ interventions would be appropriate for this patient?**
- EKG
 - repeat VS
 - O2 NC titrate to get SPO2 up then get an order from the HCP
 - CXR
 - Doppler check for pulses
 - H&P assessment
 - assess lab values and draw labs that are ordered
 - stop the NS
 - raise the HOB
 - LOC checks and mental status
 - Bladder scan
 - Last weight compared to current weight
 - Assess how much NS she has had
 - I&O
- 3. What would you anticipate the healthcare provider to order?**
- Stop the NS
 - Fluid restrictions
 - CXR
 - ABG, BNP, liver function test, thyroid panel, CBC, lipid profile, kidney function tests, serum chemistries
 - UA
 - Cardiac echo
 - Possible cardiac cath
 - Furosemide or other diuretic
 - O2 to keep SPO2 above 92-94%
 - Daily weights
 - I&O strict
 - Continuous cardiac monitoring
- 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.**
- Furosemide 20-40mg IV Q1-2hrs and increase by 20mg until desired outcome. Monitor daily weights, I&O, electrolyte balance, assess for improvement, monitor BP, assess for hearing disturbances, assess for rash and allergies.
 - Bumetanide IV 0.5-1mg Q 2-3 hrs PRN up to 10mg per day. Same interventions as furosemide.

- Spironolactone 25mg – 200mg per day in one or two doses. Check potassium levels before and during therapy, watch BP, I&O, daily weights. Educate on no salt substitutes, can be given with food, avoid driving until used to medication.
- Morphine Sulfate 2-4mg Q3-4 HRS. Monitor respiratory status and LOC, assess RR and BP before administering, assess bowel function, give slowly for IV push over 5 mins
- Hydrochlorothiazide 12.5-100mg/day in 1-2 doses. Do not give more than 200mg per day. Monitor BP, I&O, daily weights, assess for rash, monitor electrolyte balances and BUN.
- Nitroglycerin 0.3-0.6mg SL may repeat every 5 mins for 2 additional doses. Monitor BP and pulses, monitor EKG readings.
- Dobutamine 2.5-15 mcg/kg/min, max dose 40mcg/kg/min. Same as dopamine.
- Dopamine 5-15mcg/kg/min IV. Monitor BP, HR, ECG, and PCWP. Monitor I&O, circulation checks. Have another RN check your dose, check your IV site often for s&s of irritation.
- Milrinone loading dose 50mcg/kg followed by 0.5mcg/kg/min. Monitor BP and HR, if BP drops excessively slow or discontinue medication. Monitor I&O, daily weights, and s&s of HF. Monitor ECG reading during therapy, dysrhythmias are common. Have RN and HCP double check orders and doses. Give loading dose over 10 mins.
- Digoxin 0.5-1mg given as 50% of the dose initially and one quarter of the initial dose in each of 2 subsequent doses at 6-12 hr intervals. Monitor apical pulse for 1 min prior to administering, hold dose if HR <60. Monitor BP and ECG during IV therapy, also the IV site. Monitor I&O and daily weights and ask the patient if they have taken any digoxin within the last 2-3 weeks. Monitor potassium levels and watch for signs of digoxin tox. Get labs drawn to make sure they are in therapeutic range.

5. What patient education would you include?

I would tell them that there will most likely be a lot of people in and out of her room to get labs and assessments. Also, she will be receiving a bunch of different medications to help with the fluid overload she is experiencing due to HF. One of them will definitely be a diuretic which will make you urinate frequently. We will be measuring how much fluid you will be taking in and putting out. Also, we will be doing daily weights which should be continued at home as well and any gain over 2 pounds should be reported to the HCP. You will be on a continuous heart monitor to watch for any changes, so that we are able to catch them as soon as possible. There will be a lot of testing being done like an echocardiogram, this will show how well the blood is moving in and out of your heart. It will not hurt it is like an ultrasound if you have ever had one of those. I would explain that she will need to be on supplemental O2 until she can breathe well on her own, this is due to having fluid on her lungs. She might also have to have a procedure called a cardiac cath but if that were to happen the doctor would come in and explain that. Also the HOB needs to stay elevated to prevent respiratory distress.