

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?

- Do you feel fatigued, lightheaded, or dizzy?
- Do you have sleep apnea or any problems sleeping at night?
- Have you noticed any changes in your weight recently?

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

- Get a health history.
- Perform an ECG
- Raise the head of the bed.
- Stop the IV fluids.
- Apply supplementary oxygen via nasal cannula.
- Daily weight measurements

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

- An ECG
- Titrated oxygen
- Diuretics
- Inotropes
- vasodilators
- SCDs
- Fluid restriction

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.

- Hydrochlorothiazide- thiazide diuretic
 - o 12.5-100 mg per day in 1-2 doses
 - o Monitor electrolyte levels, signs of electrolyte imbalance, dysrhythmias

caused by hypokalemia. Pair with potassium supplements or replace with a potassium-sparing diuretic if taking digoxin.

- o Monitor blood glucose.
- o Monitor uric acid levels.
- o Notify HCP of any abnormalities
- **Furosemide- loop diuretic**
 - o 20-80 mg per day in a single dose initially, may repeat in 6-8 hours or increase the dose by 20-40 mg every 6-8 hours until the desired response is reached.
 - o Monitor electrolyte levels and signs of electrolyte imbalance.
 - o Monitor BP frequently.
 - o Monitor for hearing loss, tinnitus, or vertigo.
 - o Monitor blood glucose.
 - o Monitor for dysrhythmias if hypokalemia occurs.
 - o Pair with potassium supplements or replace with a potassium-sparing diuretic if taking digoxin.
- **Spironolactone- potassium sparing diuretic**
 - o 25 mg daily, if hyperkalemia occurs, change to 25 mg every other day.
 - o Monitor serum potassium levels.
 - o Monitor for dysrhythmias caused by hyperkalemia (take apical pulses and place a heart monitor on the patient).
 - o pair with a thiazide or loop diuretic to maintain potassium levels.
 - o Monitor for male or female related endocrine effects and report to the HCP.
- **Digoxin- cardiac glycosides/inotropic**
 - o 0.5-1 mg at 6-12-hour intervals
 - o monitor and report GI symptoms and CNS effects.
 - o Take apical pulses for a full minute and hold the drug if it falls below 60 bpm.
 - o Monitor digoxin levels as well as serum potassium levels.
 - o Monitor for and treat dysrhythmias.
 - o administer immune Fab in case of digoxin toxicity.
- **Dobutamine- inotropic/sympathomimetic**
 - o 2.5-15 mcg/kg/min titrated to response.
 - o Monitor cardiac rhythm via heart monitor.
 - o Monitor vitals frequently (especially BP).
 - o Monitor for dysrhythmias and discontinue the drug for tachydysrhythmias or chest pain.
- **Milrinone- inotropic**
 - o 50 mcg/kg followed by continuous infusion at 0.5 mcg/kg/min.
 - o Correct fluid deficits and hypokalemia before infusion.

- Monitor potassium levels and correct as needed during the infusion.
- Monitor vital signs, heart rhythms, and any chest pain.

5. What patient education would you include?

- Reduce fluid intake.
- Wear compression stockings to improve blood flow.
- Call your HCP if you experience muscle spasms, nausea, or abnormal heart rhythms.
- Monitor for signs of digoxin toxicity such as nausea, vomiting, loss of appetite, headache, visual disturbances, or heart palpitations.
- Monitor pulses at home and report any abnormalities.
- Take medications as prescribed at the same time each day.
- Do not skip or double digoxin doses.