

Firelands Regional Medical Center School of Nursing  
AMSN 2023  
Unit 6: Heart Failure online assignment (1.5H)

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. 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?**

When did these symptoms start? What is the patient's history and admitting diagnosis? What medications is she currently on? Has she experienced symptoms like this before?

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

Raise the head of the bed to a high fowlers position, have them place their legs horizontally or dangling off the bed, place oxygen through NC, stop the fluids running, and place the patient on the monitor if she is not already.

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

Oxygen, frequent vital signs and continuous ECG monitoring, a diuretic, a medication to stabilize blood pressure such as an ACE inhibitor or ARB, digoxin, morphine, a low sodium diet, circulatory assist device, PT/OT, and daily weights.

**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.**

**Diuretics:** furosemide (20-80 mg/day)

bumetanide (0.5-2 mg/day)

hydrochlorothiazide (12.5-100 mg/day),

spironolactone (25 mg once daily or every other day)

- Monitor urine output, decreased symptoms, weight loss, and potassium and magnesium levels.

- Monitor for dehydration: skin turgor, mucus membranes.
- Monitor BP and HR

**Ace Inhibitors:** captopril (25 mg 3x daily)

lisinopril (5 mg once daily)

enalapril (10 mg twice daily)

- Monitor BP, renal function, and potassium levels.

**ARBs:** losartan (50 mg daily)

valsartan (40 mg 2x daily, target 160 mg 2x daily)

- Monitor BP, renal function, and potassium levels.

**Digitalis Glycoside:** Digoxin 0.125 mg daily

- Monitor drug serum levels (want <0.9 ng/ml), renal function, potassium levels, and magnesium levels.
- Take apical pulse for a full minute, withhold if <60.
- Observe for signs of toxicity.

**Neprilysin-angiotensin receptor inhibitors:** Entresto (Target: Sacubitril 97 mg/valsartan 103 mg 2x daily)

- Monitor BP, pulse, renal function, and for angioedema.
- Daily weights

**Beta-blockers:** metoprolol succinate (12.5-25 mg once daily)

Carvedilol (3.125 mg 2x daily, can be doubled every 2 wk)

Bisoprolol (2.5-20 mg/day)

- Monitor heart rate and BP and educate to not stop abruptly.

**Beta-adrenergic Agonists:** dobutamine (2.5-15 mcg/kg/min)

dopamine (5-15 mcg/kg/min)

- For dopamine monitor IV site, extravasation can cause tissue necrosis. MONITOR ECG.
- Monitor CO, BP, urine output, and filling pressures.

**Phosphodiesterase inhibitors:** milrinone (loading: 50 mcg/kg, then 0.5 mcg/kg/min)

- Monitor CO, BP, urine output, filling pressures, ECG (can cause dysrhythmias), renal function, and CBC (can cause thrombocytopenia).

**Morphine:** morphine- helps with dyspnea

- Monitor respirations (can cause respiratory depression).

**Vasodilators:** isosorbide (10-40 mg every 6 hr)

Nitroglycerin (5 mcg/min, increase by 5 mcg every 3-5 min until relieved)

Nesiritide (2 mcg/kg bolus then 0.01 mcg/kg/min)

- Monitor BP carefully.

## 5. What patient education would you include?

I would educate the patient on medication compliance, how to take their pulse daily if needed, diet changes (low sodium), physical activity changes (increase walking), to change positions slowly, to obtain influenza and pneumococcal vaccinations, how to reduce risk factors (BP control, smoking cessation, DM management), educate on daily weights, worsening HF

symptoms, and when to call HCP (3 lb weight gain in 2 days, difficulty breathing, waking up breathless at night, fatigue, weakness, dry cough, edema in ankles, feet or abdomen, dizziness).