

Assessing Volume Overload in Heart Failure Patients

Below are guidelines to follow when trying to determine if a heart failure patient has volume overload.

History

Ask the patient about the presence of the below symptoms and if they are experiencing any changes from when they feel good (when their heart failure is at its best)

1. Increased shortness of breath
2. Increased (DOE)
3. Increased Orthopnea
4. Increase in abdominal girth
5. Increase in lower extremity edema
6. Any recent changes in weight +/-
7. Dizziness / light-headedness -
8. Falls –
9. Syncope -

Exam

Do an exam on the patient looking at the following things

1. Changes in weight +/-
2. Check vitals (BP and HR) -- low BP and high HR can be signs of dehydration
 - a. If concerned for dehydration, check orthostatic blood pressure (drop in BP or increase in HR from lying to standing)
3. Check O2 saturation for dyspnea and volume overload (low oxygen saturation can be sign of volume overload)
4. Check lungs for crackles +
5. Check for JVD +
6. Check for dependent edema (LE or sacral) +

Labs

If no signs of volume overload or volume depletion or not confident in assessment after history and exam, consider:

1. BNP (> 300 = relative volume overload)
2. CXR (looking for redistribution, effusion, or edema)
3. Electrolytes/ BUN/ Cr (increased BUN suggestive of relative dehydration)