

# ATI MED SURG VIDEO CASE STUDIES RN 3.0 HEART FAILURE

A nurse is assessing a client who has left-sided heart failure with decreased cardiac output. Which of the following manifestations should the nurse expect?

Flushing of the skin on exertion

Nocturia at night

Warm lower extremities

Respiratory rate of 16/min

Flushing of the skin on exertion

The client who has left-sided heart failure with decreased cardiac output will appear pale in color on exertion due to poor tissue perfusion.

## **Nocturia at night**

The client who has left-sided heart failure with decreased cardiac output can have oliguria during the day and nocturia at night due to poor tissue perfusion to the kidneys.

Warm lower extremities

The client who has left-sided heart failure with decreased cardiac output will have cool extremities due to poor tissue perfusion.

Respiratory rate of 16/min

The client who has left-sided heart failure with decreased cardiac output will have tachypnea due to intra-alveolar fluid causing engorgement of pulmonary vessels.

Weak peripheral pulses

A client who has left-sided heart failure will have manifestations of weak peripheral pulses due to decreased cardiac output.

A nurse is assessing a client who is restricted to bedrest for manifestations of right-sided heart failure. Which of the following findings should the nurse expect?

Weak peripheral pulses

Angina

Sacrum edema

Crackles in the lungs

Angina

A client who has left-sided heart failure will have manifestations of angina due to decreased cardiac output.

**Sacrum edema**

A client who has right-sided heart failure and is restricted to bedrest will often have fluid accumulation in the sacral area when compared to a client who is ambulatory. The edema is due to increased systemic venous pressures and congestion.

Crackles in the lungs

A client who has left-sided heart failure will have manifestations of crackles in the lungs due to decreased cardiac output.

Bradycardia

Tachycardia is an adverse effect of enalapril.

A nurse is monitoring a client who has received enalapril for heart failure. The nurse should identify which of the following findings as an adverse effect?

Bradycardia

Orthostatic hypotension

Increased perspiration

Somnolence

**Orthostatic hypotension**

Enalapril, which is an angiotensin-converting enzyme, prevents conversion of angiotensin I to angiotensin II, causing dilation of the arterial and venous vessels. This can lead to the client developing orthostatic hypotension.

Increased perspiration

Decreased perspiration is an adverse effect of enalapril. Clients who are taking enalapril should avoid becoming overheated in warmer weather.

Somnolence

Insomnia is an adverse effect of enalapril.

**Creatinine 1.8 mg/dL**

The nurse should notify the provider of a creatinine 1.8 mg/dL. Clients receiving an ACE inhibitor and spironolactone together, may develop hyperkalemia and dysthymias.

**Potassium 4.2 mEq/L**

A potassium level of 4.2 mEq/L is within the expected reference range; however, the nurse should monitor for hyperkalemia when the client is receiving an ACE inhibitor and spironolactone together.

**BNP 98 pg/mL**

A BNP of 98 pg/mL is within the expected reference range; however, BNP of greater than 100 mg/mL is a critical value indicating ventricular stretching that can lead to congestive heart failure.

**d-Dimer 0.3 mcg/mL**

A d-Dimer of 0.3 mcg/mL is within the expected reference range; however, d-Dimer of greater than 0.4 mcg/mL can indicate formation of a thrombus, leading to a pulmonary embolus.

A nurse is reviewing the laboratory values for a client who is taking an ACE inhibitor and spironolactone for heart failure. The nurse should notify the provider for which of the following laboratory values?

Creatinine 1.8 mg/dL

Potassium 4.2 mEq/L

BNP 98 pg/mL

d-Dimer 0.3 mcg/mL

A nurse is planning care for a client who has heart failure. Which of the following interventions should the nurse include in the plan of care?

Maintain sodium intake at 3.5 gm daily.

Limit fluid intake to 2 L per day.

Administer NSAIDs for minor discomfort.

Place the client in a lateral recumbent position.

Maintain sodium intake at 3.5 gm daily.

The nurse should plan to limit the client's sodium level between 2 to 3 gm daily to decrease fluid retention, which decreases the workload of the heart.

**Limit fluid intake to 2 L per day.**

The nurse should plan to limit the client's fluid intake to 2 L daily to decrease fluid retention, which decreases the workload of the heart.

Administer NSAIDs for minor discomfort.

The nurse should avoid administering NSAIDs to prevent sodium and fluid retention.

Place the client in a lateral recumbent position.

The nurse should elevate the head of the client's bed 45° to promote expansion of the chest wall and facilitate breathing.