

Exercise intolerance

Orthopnea

Cough, hoarseness

Cyanosis

Wheezing

Grunting

### **Systemic Venous Congestion**

Weight gain

Hepatomegaly

Peripheral edema, especially periorbital

Ascites

Neck vein distention (children)

### **Diagnostic Evaluation**

Diagnosis is made on the basis of clinical symptoms, such as tachypnea and tachycardia at rest, dyspnea, retractions, activity intolerance (especially during feeding in infants), feeding intolerance, weight gain caused by fluid retention, and hepatomegaly. Chest radiography demonstrates cardiomegaly and increased pulmonary blood flow. Ventricular hypertrophy, abnormal rhythm or decreased voltages appear on the ECG. An echocardiogram is done to determine the cause of HF, such as a congenital heart defect or poor ventricular function.

### **Therapeutic Management**

The goals of treatment are to (1) improve cardiac function (increase contractility and decrease afterload), (2) remove accumulated fluid and sodium (decrease preload), (3) decrease cardiac demands, and (4) improve tissue oxygenation and decrease oxygen consumption.