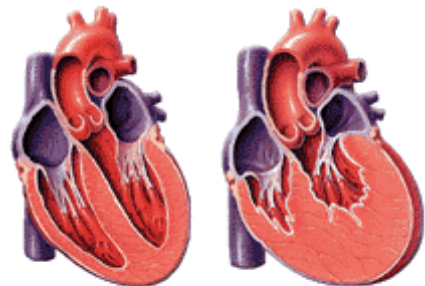
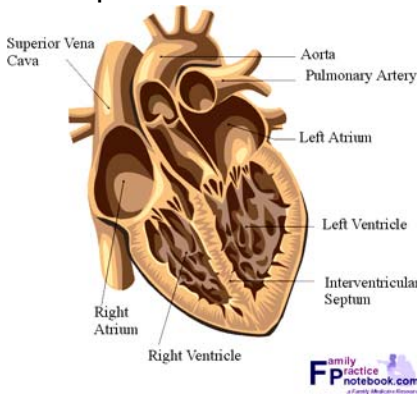


CONGESTIVE HEART FAILURE

Definition: Is a medical condition that arises when the output of the heart is insufficient to meet the metabolic needs of the body.^{2,4,7,8}

Causes: The most common cause of congestive heart failure is coronary disease and myocardial infarction. Other causes are heart valve disease, congenital heart defects and high blood pressure. ^{1,2,4,8,9}



NORMAL HEART ANATOMY

NORMAL VS CONGESTIVE HEART

TREADMILL EXERCISES

Pathophysiology: The decrease in left ventricle function triggers a compensatory event in an attempt to maintain adequate cardiac output (blood pumped by the heart per beat): enlargement of the heart muscles and cavity, and sympathetic nervous system stimulation. The enlargement of the heart is due to increased workload of the heart has to perform due to the insufficient amount of blood being pumped per beat. This insufficiency also contributes to the movement of the fluid out of the veins (blood vessels) into the interstitial spaces of the lung resulting in pulmonary edema. Decrease in cardiac output also increases the number of heart beats per minute and blood flow redistribution. Blood is redistributed away from the limbs and towards the major organs.^{1,2,4,7,8}

Medications: The drugs are designed to increase contractility and relieve congestion. Examples of such are: digoxin, diuretics and ACE inhibitors.^{2,3,4}

Physical Therapy: Rehabilitation aims to improve: self management of symptoms, ability to perform physical tasks, healthy behavior and habits and to decrease disability associated with acute or chronic illness. This goal can be achieved by: Patient education, low level exercises, close monitoring of patient, aerobic exercises (walking, treadmill or biking) and progressive resistive exercises using theraband.^{1,2,4,6}

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6. Therapeutic Exercises by Kissner and Colby 4th Ed.
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