

What is Cor Pulmonale?

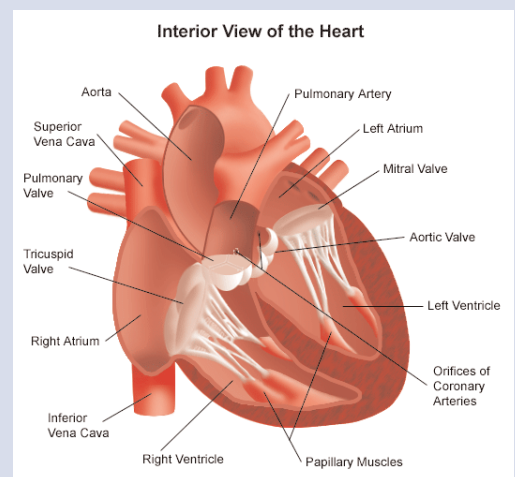
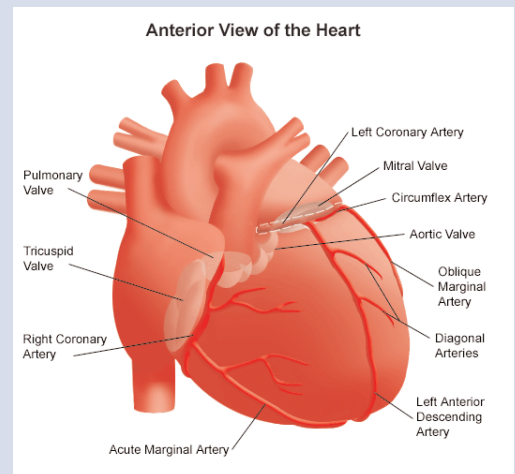
Cor pulmonale is the development of right-sided heart failure due to pulmonary hypertension. As MedlinePlus (National Institutes of Health) explains it, "Normally, the left side of the heart produces a higher blood pressure in order to pump blood to the body. The right side of the heart pumps blood through the lungs under much lower pressure. High blood pressure in the arteries of the lungs is called pulmonary hypertension. The right side of the heart has a harder time pumping blood against these higher pressures. If this high pressure is present for a longer period of time, it puts a strain on the right side of the heart, leading to cor pulmonale."

The condition can be caused by various lung conditions, but in people with neuromuscular disease or COPD, it is more often caused by low blood oxygen over a long period of time, which coupled with high carbon dioxide levels in the blood leads to hypoventilation (underventilation). Cor pulmonale is more common among people with neuromuscular disorders who also have significant chest wall involvement.

Symptoms include shortness of breath, light-headedness, chest discomfort and pain, abdominal pain due to liver enlargement, and perhaps fainting. The failure of right side of the heart causes body fluids and blood to build up, sometimes all over the body, but a big warning symptom is fluid retention in the ankles. Other signs can be abnormal heart sounds, swelling of the neck veins, and in later stages, bluish skin (cyanosis) signaling low oxygen levels.

Diagnostic tests may include electrocardiogram, chest X-ray, Holter monitoring, echocardiogram to check ejection fraction of each ventricle, and arterial blood gas tests. Diuretic treatment is usually prescribed, with perhaps a potassium supplement to replace that lost through the kidneys from the diuretic use. Prompt treatment with assisted ventilation, either with a bilevel ventilator or volume/pressure support ventilator, can reverse the condition.

Preventing the condition in the first place is key. Know the signs and symptoms of hypoventilation.



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See "What is hypoventilation?."

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