



CONGESTIVE HEART DISEASE

The Job of the Heart

The heart is simply a pump. It pumps blood. The left side of the heart receives fresh oxygenated blood from the lungs into its upper chamber or atrium. The atrium pumps blood into the lower chamber or ventricle, which with great force, pumps blood out into the body through arteries.

The right side of the heart, also with an upper and lower chamber (atrium and ventricle), receives blood from the body through the veins and pumps it into the lungs. In the lungs carbon dioxide is exchanged for oxygen. The capillaries are a fine network of blood vessels fed by the arteries, oxygenating the tissues of the body, and then draining into the veins.

The upper and lower chambers of the heart and the outflow arteries have valves that prevent blood from flowing backward. These are what cause the familiar “lub-dub” sound during the heartbeat.

What is Congestive Heart Failure?

If the heart cannot pump blood adequately throughout the body a number of things happen which are referred to collectively as congestive heart failure. The causes can vary from congenital defects, to valve abnormalities or leaks, disease of the heart muscle itself, rhythm abnormalities, to heartworm disease. When the heart is diseased the output or amount of blood pumped is lowered. This lowers the amount of blood circulating and therefore the amount of oxygen the tissues receive. When oxygen levels drop, the nervous system stimulates the heart to pump harder and faster and stimulates the peripheral blood vessels to constrict in an attempt to raise the blood pressure.

The kidneys respond to low oxygen level and low arterial blood pressure by retaining more water and sodium (salt) than they normally would. This is an attempt to increase blood volume. The heart itself will respond by increasing in size so that it can pump a larger volume of blood. The heart working harder and harder, gradually becomes more stressed until it is incapable of maintaining proper blood dynamics.

The Signs of Heart Failure

The signs or symptoms of congestive heart failure may include exercise intolerance, intermittent coughing (especially at night), shortness of breath, and enlargement of the abdomen with retained fluid. Early on the signs can be very mild.

Treatment

All the medicines that we might use are an attempt to make the heart a more efficient pump and to decrease the congestion that occurs in the lungs and liver. One mainstay of treatment is the diuretic drugs like Lasix. They mobilize the excess retained water and salt and move it out by stimulating urine production. Another group of drugs is the vasodilators such as Enacard. They allow the blood to flow more easily through the tiny arteries and capillaries, reducing the work load on the heart. Bronchodilators can relax the airways and reduce the intensity of the cough.

Diet is important too. It should be carefully balanced to be low in salt and produce minimal urinary wastes. Obese animals are at greater risk, yet exercise must be limited to avoid stressing the heart, so proper diet is essential.

Most cases of congestive heart failure have no cure, but careful attention to treatment and diet can reduce the clinical signs and add years to the life of a pet that otherwise would not be able to live very long. Because the disease never really leaves, frequent reexaminations are important and the medicines will have to have their doses adjusted according to changes in the pet.

Your next appointment is _____.

Call Us If...

- Your pet loses its appetite or seems very tired.
- You notice any degradation in your pet's general health
- Your pet is coughing more than usual.

Thank you for this opportunity to serve you!