

Heart Muscle Disease: Dilated Cardiomyopathy in Dogs

Understanding Your Pet's Medical Diagnosis

from www.VetMedCenter.com

What is dilated cardiomyopathy in dogs?

Dilated cardiomyopathy is a disease of the heart muscle, which becomes thin and weak. It is characterized by an expansion or widening (dilatation) of the chambers of the heart, resulting in an abnormally large heart. This disease eventually results in heart failure, since the damaged heart muscle is too weak to efficiently pump blood to the rest of the body. Dilated cardiomyopathy is reported more commonly in Doberman pinschers, boxers, cocker spaniels, and giant-breed dogs.

What causes dilated cardiomyopathy in dogs?

The cause of dilated cardiomyopathy cannot be identified in most dogs. Suggested causes of the changes in the heart include infection of the heart muscle, immune-mediated disease (in which the animal's own immune system damages the heart), or nutritional deficiency. Dilated cardiomyopathy has been associated with low levels of a substance (L-carnitine) required for energy metabolism in the heart. It also has been associated with low levels of the amino acid, taurine, in some breeds.

What are signs of dilated cardiomyopathy in dogs?

The clinical signs of dilated cardiomyopathy are related to the severity of damage to the heart muscle and the degree of heart failure affecting the dog. The dog may not have signs in the initial stages of dilated cardiomyopathy. Some signs commonly associated with dilated cardiomyopathy include weakness, depression, coughing, difficulty breathing, large abdomen, loss of appetite (anorexia), and weight loss. Physical examination findings may include abnormal heart rhythms, weak pulses, or abnormal lung sounds. Clinical signs associated with damage to other organs from insufficient blood flow also may be seen.

How is dilated cardiomyopathy diagnosed in dogs?

Dilated cardiomyopathy is diagnosed by a good medical history, a thorough physical examination, and an analysis of the heart. Electrocardiography (ECG or EKG, an electrical analysis of the heart) is used to detect characteristic abnormalities associated with dilated cardiomyopathy. Radiographs (X-rays) of the chest and abdomen can be performed to assess the degree of heart enlargement and other body changes. Echocardiography (ultrasound of the heart) is used to diagnose dilated cardiomyopathy definitively. Echocardiography allows the veterinarian to assess the structure and function of the heart and to measure the thickness of the walls of the heart chambers (atria and ventricles). In addition, blood and urine tests can determine the dog's overall health status and detect organ damage related to poor systemic blood flow.

How is dilated cardiomyopathy treated in dogs?

The treatment of dogs with dilated cardiomyopathy varies with the severity of heart failure and specific organ damage. Treatment options include oxygen administration, fluid therapy,

and administration of drugs that improve breathing (bronchodilators) and drugs that modify heart function. Recheck examinations should be scheduled at regular intervals to assess response to treatment and to check for worsening signs. Repeat blood and urine tests can be scheduled to monitor for side effects of the medications.

What is the prognosis for dogs with dilated cardiomyopathy?

The prognosis (outcome) for dogs with dilated cardiomyopathy varies, depending on the severity of the disease at the time of diagnosis. Whereas medical management may ease some of the signs, damage to the heart is permanent. Some dogs may respond to L-carnitine or taurine supplementation. Sudden death may occur; in some dogs sudden death will be the only sign of disease. Dilated cardiomyopathy is a progressive disease that is always fatal.