Dilated Cardiomyopathy (DCM)

What is it?

DCM is a disease of the heart muscle that results in weakened contractions and poor pumping ability. As the disease progresses the heart chambers become enlarged, one or more valves may leak, and sign of congestive heart failure develop.

What causes it?

SWIDOUNDLAND CC CA AMERICA

The cause of DCM is unclear in most cases, a number of factors including nutritional, infectious, and genetic predisposition have been implicated. Large breeds are most often affected, among them Newfoundlands.

Signs & Symptoms

Clinical signs include dilation of the ventricles with ventricular wall thinning, resulting in a diminished ability of the heart to serve as a pump. Early in the disease the dog may show reduced exercise intolerance, and in some cases a soft heart murmur, other irregular heart sound, and/ or irregular heart rhythm. As the disease progresses, blood pressure starts to increase, and congestion and fluid accumulation often develops behind the left ventricle/atrium. Fluid may also accumulate in the abdomen or around the lungs.

Testing & Treatment

How is it diagnosed?

A cardiac exam by a veterinarian can detect abnormal heart sound and many signs of heart failure. Chest x-rays and an electrocardiogram performed by a Board Certified Cardiologist will confirm the suspected diagnosis and assess the severity. An echocardiogram can be used to screen for early DCM in breeds with a higher incidence of the disease.

How is it treated?

Treatment of DCM is directed at improving the pumping function of the heart, dilating the peripheral blood vessels to decrease ventricular workload, eliminating pulmonary congestion and controlling heart rate and cardiac arrhythmias. ACE inhibitors or other cardiac medications can be use orally or by injection to slow the disease.

Prognosis:

The prognosis is variable depending upon the breed and status at time of examination. Dogs with congestive heart failure generally have a worse prognosis than those who are not, but medical therapy can improve the lifespan and quality of life in affected dogs.

Prevention/Breeding implications:

There is currently no scientifically proven way to prevent. There is a genetic component, so a heart check on both sire and dam prior to breeding is recommended. Recent research shows a correlation between taurine and DCM, but more studies are needed to fully understand the connection.