

Dilated Cardiomyopathy

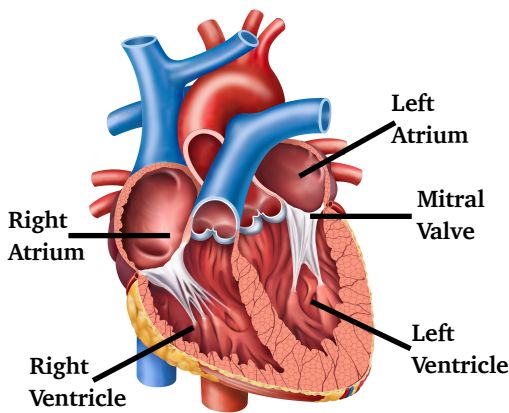


TRILLIUM
VETERINARY CARDIOLOGY

QUICK FACTS:

- ♥ Dilated cardiomyopathy (DCM) is the 2nd most common acquired heart disease in dogs
- ♥ 25-50% of Doberman Pinschers develop DCM
- ♥ Causes of DCM include genetic/familial traits, nutritional deficiencies, hypothyroidism, toxins, infectious causes
- ♥ Echocardiography is the gold standard for diagnosis and assessment of dogs with DCM
- ♥ Vetmedin® has been shown to delay the time to CHF for dogs with DCM
- ♥ Signs of CHF include coughing, difficulty breathing, decreased activity level, fainting, poor appetite
- ♥ Unfortunately some patients will die suddenly due to life-threatening arrhythmias

Dilated cardiomyopathy (DCM) is a common heart disease diagnosed in dogs. This disease generally affects medium-large breed dogs, with an increased risk in certain breeds such as Doberman Pinschers, Irish Wolfhounds, Great Danes and Cocker Spaniels. DCM is usually characterized by a dilated and enlarged heart. Irregular heart rhythms (arrhythmias) are also frequently noted in these patients.



DCM causes a weakening of the heart muscle and dilation of the heart chambers. The left ventricle (LV) is most commonly affected, but both ventricles can be affected. With DCM, the heart cannot pump blood out to the body effectively. Eventually the left atrium will also dilate as pressure builds up in the heart. The end-result is congestive heart failure (CHF) when fluid starts to accumulate in the lungs (pulmonary edema).

Physical examination can be completely normal in the early stages of DCM, making this disease difficult to diagnose. An **echocardiogram** (ultrasound of the heart) is a non-invasive test that allows us to look inside the heart and is the only way to diagnose DCM in the early stages. Other tests that may be indicated for dogs with DCM:

- ◆ Chest X-ray - to assess overall heart size and the lungs
- ◆ Electrocardiogram (ECG) or Holter - to assess electrical activity in the heart, particularly if there is an irregular heart beat (arrhythmia)
- ◆ Blood pressure - to determine if there is excess stress on the heart
- ◆ Blood tests such as thyroid panel, taurine, troponin to look for other diseases that can decrease the pumping function of the heart

Treatment is aimed at slowing the progression of this disease and minimizing clinical signs. Early detection is important because Vetmedin® and benazepril can significantly slow progression of this disease and delay the time to CHF. Anti-arrhythmic medications can decrease the frequency of abnormal heart beats, thereby decreasing the chances of life-threatening arrhythmias. Once a patient progresses to CHF, diuretics such as furosemide must be added and breathing should be monitored at home. Low-sodium diets can minimize salt and water retention in patients.

