

What are the goals of treatment?

Treatment of DCM is aimed at both improving the heart's function and controlling the signs of congestive heart failure.

Drugs such as digoxin are used to help the heart contract better and to slow the heart rate if indicated. Diuretics such as lasix are used to help control and prevent accumulation of fluid in or around the lungs. ACE inhibitors, such as enalapril, are prescribed to reduce the cardiac workload by dilating arteries. They can therefore occasionally affect the kidneys and will require regular kidney evaluation with blood chemistry analysis.

Additional drugs may be prescribed to control cardiac arrythmias (electrical disturbances in the heart) or to address any other special needs your pet may have.

What should I monitor at home?

It is important that you monitor your dog's overall attitude and any change in appearance. It may be helpful to keep a record of your pet's breathing rate so that you will notice increases or changes from normal breathing. If you notice any of the following, please call us immediately:

- heavy or labored breathing
- coughing
- fainting spells
- severe exercise intolerance
- restlessness
- lethargy

Thank you for visiting the cardiology service at the Ryan Veterinary Hospital. If you have any further questions, please do not hesitate to contact us.

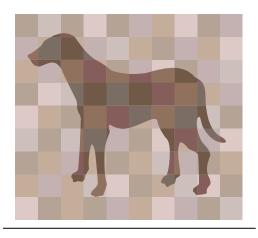


Matthew J. Ryan Veterinary Hospital Section of Cardiology

Matthew J. Ryan Veterinary Hospital University of Pennsylvania School of Veterinary Medicine 3900 Spruce Street Philadelphia, PA 19104 Phone: 215-898-8889 Emergency: 215-898-4685



Understanding Canine Dilated Cardiomyopathy

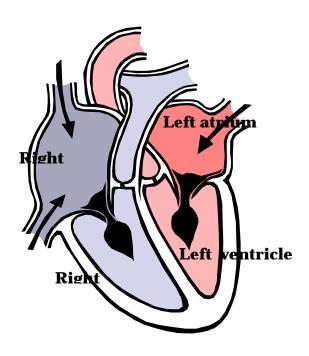


Many Species. One Medicine.

Dilated Cardiomyopathy

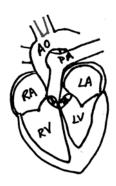
How does the heart work?

The heart is the organ responsible for maintaining the circulation of blood within the body. It is a four-chambered organ containing right and left atria (upper chambers) and ventricles (lower chambers). The right side pumps deoxygenated blood returning from the venous system in the body into the lungs. From the lungs, oxygenated blood enters the left side of the heart where it is pumped out into the tissues of the body through the arteries.

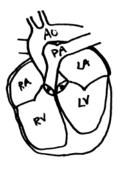


What is Dilated Cardiomyopathy?

Dilated cardiomyopathy (DCM) is a disease of the heart muscle which causes the heart to weaken and enlarge. DCM usually affects both the left and right sides of the heart. Typically, both the ventricles and the atria are enlarged and often the muscular walls of the heart are much thinner than normal. The end result is an impairment in the ventricle's ability to pump blood out to the body and lungs. When the ventricles fail to pump effectively, a backup of blood results in the systemic circulation. If the left heart fails, fluid backs up into the lungs causing coughing and/or difficulty breathing. If the right heart fails, fluid backs up into the abdomen causing abdominal distension or pleural effusion (fluid in the space surrounding the lungs).



Normal Heart

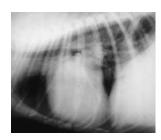


Heart with DCM

Who is commonly affected by DCM?

The disease usually afflicts large breed dogs such as the Doberman pinscher, Boxer, Newfoundland, Great Dane, Golden retriever, Labrador retriever, and the Irish wolfhound. DCM can also affect English and American cocker spaniels, and rarely, other small breed dogs. In American cocker spaniels, the disease may be related to a deficiency in taurine and/ or L-carnitine (amino acids).

The occurrence of DCM increases with age and typically has an age of onset between 4 and 10 years. However, DCM occurs in young Portuguese water dogs as an inherited disease.



What is the long term prognosis for DCM?

Long term prognosis for DCM varies considerably. Unfortunately, most dogs with signs of congestive heart failure at the time of diagnosis die as a result of the disease within 6 months. In the most severe cases, some dogs may survive only weeks to a few months. Occasionally, dogs may do well clinically for 1-2 years.