



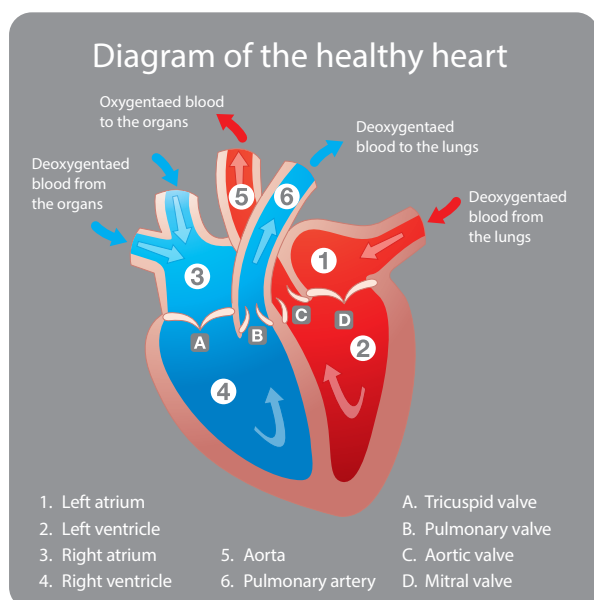
Your dog, congestive heart failure and you

Whilst heart failure is a lifelong condition, treatments are available that will help relieve the symptoms of disease and extend your dog's life. This leaflet is designed to answer some of the questions you may have and provide advice on how to best to help your dog during treatment.

What does heart failure mean for my dog?

A diagnosis of heart failure for your dog means that his or her heart is not working as efficiently as it should. To understand how you can help your dog best, it is useful to know how a healthy heart works.

A dog's heart



A dog's heart works to pump blood around the circulation. This system provides oxygenated blood to all the vital body organs or muscles. Your dog's heart is just like a human heart and consists of a muscular pump containing four chambers.

The chambers are separated by four one-way valves. The closure of these valves is what makes the typical 'lub-dup' sound we all associate with a normal heartbeat.

Canine heart disease

Where any abnormality occurs within a healthy heart, the patient is considered to have heart disease. The most common heart diseases encountered in dogs occur due to abnormalities in the valves or the heart muscle itself.

Mitral Valve Disease (MVD)

Mitral valve disease is the most common heart disease in the dog, and tends to occur most commonly in the small to medium sized breeds, such as the Cavalier King Charles Spaniel.

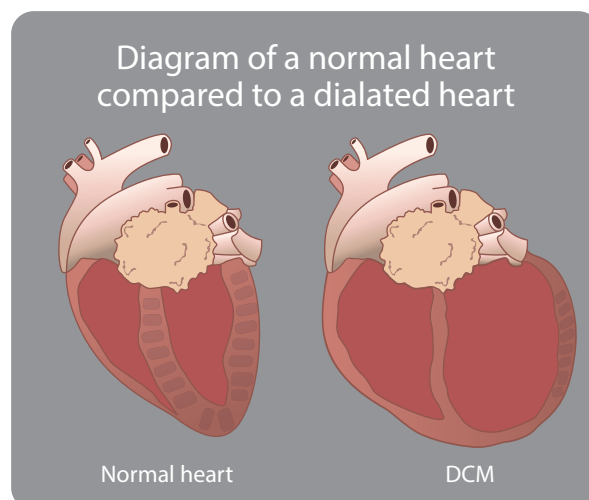
In MVD, one of the valves of the heart becomes thickened and misshapen so it does not close with a tight seal. The valve therefore no longer acts as a non-return valve, but results in a squirt of blood through gaps in the valve backwards. This may lead to accumulation of fluid (blood volume) into your dog's lungs.

This squirt of blood flowing the wrong way through a heart valve creates a sound, which is called a murmur. In the early stages of MVD, a murmur may be the only symptom your dog displays.

Dilated Cardiomyopathy (DCM)

This type of heart disease tends to affect larger breeds of dog such as the Doberman. The muscle of the heart becomes weak over time and the chambers of the heart become dilated.

The heart has to work faster to pump blood around the body. Gradually not enough blood is pumped out of the heart and some blood builds up backwards, leading to fluid accumulating in your dog's lungs.



When does heart disease become heart failure?

For most dogs, heart disease is progressive. In the early stages the hearts' of dogs with MVD and DCM generally compensate for the disease.

However, eventually the extra work becomes too much and the heart is unable to pump enough blood out into the circulation and at the same time, fluid accumulates in the lungs. It is at this point where a dog is considered to be in heart failure.

Recognising the signs of heart failure

When your dog's heart is working inefficiently, not enough oxygenated blood is getting to the vital organs or muscles.

Your dog may;

- become more tired than expected when out for a walk
- choose to rest more at home
- breathe quickly
- have a larger abdomen (stomach area) than normal
- have a cough
- be less interested in food and lose weight
- collapse or faint

If you become concerned about your dog's health you should consult your veterinary surgeon immediately.

Diagnosing heart failure

Your vet will give your dog a thorough examination including listening to your dog's heart with a stethoscope. They will also ask you questions about what you've noticed at home.

A stethoscope will only provide limited information about your dog's heart. Your vet is likely to want to do further tests on your dog to establish that a heart condition is the cause of his or her symptoms; or whether they have another condition such as a respiratory disease (which has similar symptoms). This will help them decide on the correct treatment plan for your dog.

Your vet may wish to do the following tests:

- X-ray (radiograph) – to assess the size of your dog's heart and determine if there is any fluid in the lungs
- Ultrasound of the heart (echocardiogram) - to look at the heart muscle and valves and to assess if any the heart's chambers are dilated/swollen
- Blood test – to check the general health of your dog
- Electrocardiogram (ECG) – to assess the electrical activity of the heart which controls the co-ordinated pumping of the heart.

Treatment of heart failure

Your vet may well choose a combination of medicines to treat your dog's heart failure. These medicines can be divided into three families according to their function, i.e: those which:

- 1 Increase the strength of the heart contractions (inotropes)
- 2 Dilate blood vessels (vasodilators)
- 3 Remove fluid (diuretics) e.g. frusemide

These medicines will improve the efficiency of your dog's heart and reduce the symptoms of heart failure. Treatment will not cure your dog's heart failure but will improve his or her quality of life.



Monitoring your dog's heart condition

It is important to ensure your dog is given his or her heart medication regularly, as prescribed by your vet.

You can also help by monitoring your dog at home. It is very important for your vet to have a clear picture of how your dog has been doing on their medication and whether they have signs which may indicate progression of heart failure.

To help you with this, please ask your vet for the home monitoring charts. The chart enables you to monitor and share your findings with your vet. The chart enables you to monitor:

1. Appetite
2. Exercise levels
3. Happiness
4. Coughing
5. Respiratory (breathing) rate

Nutrition and your dog

Nutrition can also play an important role in the care of congestive heart failure cases. Omega-3 fatty acids from marine sources support maintenance of lean body mass, appetite and normal cardiac rhythm.



For more information, please contact your Vet