

Heart Disease

Heart disease is a fairly common (and sometimes very serious) presentation to the veterinary clinic. It is very common for veterinarians to detect heart murmurs in dogs, especially as they age. This indicates that the dog has a leaky valve in their heart, but in many cases the heart murmur is innocuous. It is not until the dog develops symptoms of heart failure that we become concerned. There are many different types of heart disease. Not all dogs with heart disease will have a heart murmur. For the purposes of this article, I am going to concentrate on the two most common causes of heart disease – mitral valve disease and cardiomyopathy.

Mitral valve disease (MVD) is by far the most common cause of heart disease in dogs. It occurs when the valve between the left atrium and left ventricle becomes diseased. MVD can occur in dogs of all breeds and sizes, although smaller breed dogs are over-represented. By far the most common breed to develop this condition is the Cavalier King Charles Spaniel. It is not until the mitral valve becomes significantly diseased that the patient develops clinical symptoms of heart failure.

The most common and early symptom of heart failure due to MVD is changes to the dog's breathing. This may be most obvious when the dog is fast asleep – their breathing rate and effort will increase. When fast asleep, a normal dog should not breathe more than 30 times per minute. If the dog is breathing more than 30 times in a minute (when asleep), they probably have a cardio respiratory problem. This rule of thumb is not true for dogs who are awake and stimulated – their breathing rate will often be a lot faster (eg panting). Other symptoms of heart failure include coughing, exercise intolerance, weakness, lethargy and weight loss. More serious symptoms that may occur in severe or late stage heart failure include pale or bluish gums, an irregular heartbeat, abdominal swelling due to fluid accumulation and fainting (called syncope).

MVD is very treatable if symptoms of heart failure are detected early. It is unnecessary to put dogs who simply have a heart murmur on medications. Heart medications are not required and are pointless to use prior to the dog developing symptoms of heart failure (like faster breathing or coughing). Once detected, appropriate medications will usually alleviate these symptoms. It is possible for dogs with clinical heart disease to live normal lives for years beyond detection of symptoms of heart failure. The most common medications used are diuretics, which shift fluid away from the lungs and other drugs that help the heart to function as efficiently as possible.

The second type of heart disease I will discuss today is dilated cardiomyopathy (DC). This occurs when the heart muscle enlarges. Dilated refers to the fact that the chambers inside the heart enlarge too. The body can compensate for a small amount of enlargement, however as the heart becomes larger and larger, the heart muscle becomes flabby and weak and loses its ability to contract efficiently. This type of heart disease occurs almost

exclusively in large and giant breed dogs, including Dobermans, boxers, Irish Wolfhounds, great danes, saint bernards and cocker spaniels.

The clinical symptoms of DC are quite similar to those of MVD, although generally DC is a much more progressive disease, with symptoms developing earlier and worsening more quickly. Unfortunately, even with appropriate treatment, patients with DC don't tend to live as long as dogs with MVD. This disease is almost always invariably fatal. The presence of a heart murmur is much less common in DC. Dogs with DC almost always have a cardiac arrhythmia (irregular heart beat). Fainting is a more prominent symptom of DC. Unfortunately dogs with DC may spontaneously pass away.

If you suspect your dog has heart disease, I would recommend consulting your veterinarian. If your dog has a pre-existing heart murmur, I would recommend periodically monitoring their sleeping respiratory rate (ensuring it is not more than 30 breaths per minute). I will emphasize that this must be done when the dog is fast asleep. Please don't be alarmed if your dog has a pre-existing heart murmur, I will also emphasize that they do not require medications until they show clinical symptoms of heart failure like fast breathing or coughing. I will also mention that lots of older dogs develop a cough. This does not mean they have heart failure. In many cases, they have chronic airway inflammation, which is common with age and often doesn't require any specific treatment. However if your dog develops a sudden cough, I would recommend consulting your veterinarian.

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