

## **Mitral Dysplasia**

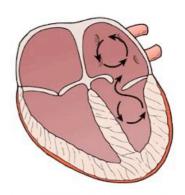
Mitral valve dysplasia is a fairly common condition in dogs and cats where the mitral valve has not formed properly at birth (also known as a congenital abnormality). The malformed allows backflow of blood from the left ventricle (lower chamber) to left atrium (upper chamber), causing a noise which we can hear with a stethascope, called a **murmur** ("whooshing sound") which is usually present from birth.

As the leak worsens, the left atrium and ventricle become enlarged and eventually the increasing pressure in the heart and lungs causes fluid to leak into the lungs. This is called pulmonary oedema, and causes difficulty in breathing, often with a soft cough. The patient is now in congestive heart failure.

Dogs with mitral dysplasia **should not be bred** as it is likely to be genetic and may be passed on to the next generation.

Animals may appear to be completely normal, or may show the following clinical signs:

- Reduced exercise ability, slowing down or collapsing after exertion.
- Coughing or breathlessness, especially at night or early morning
- Reduced appetite, increased drinking, weight loss.



A malformed mitral valve allows blood to leak backwards into the left atrium as the heart beats.

**How is it diagnosed? Echocardiography (cardiac ultrasound scan)** is the gold standard diagnostic test, allowing real time measurements of heart size, assessment of the valves, and colour mapping to show any leaks. It is painless and non-invasive, and may not even require sedation. A small amount of hair clipping is usually necessary.

An **ECG (electrocardiogram)** may be needed if there is also an irregular heart rhythm.

Can it be treated? We can start medication to support the heart function if the heart is enlarged. Diuretic treatment can help to remove fluid build-up in the lungs. However sadly, this disease usually significantly limits life expectancy.

Occasionally mitral valve surgery may be possible (in dogs) to improve the function of the valve for the longer term. This is open heart surgery (under heart bypass) and is only performed at a small number of specialist centres in the world. Please contact us for more information

How can I monitor my pet at home? Dogs with mild disease can enjoy walks as normal and there is no need to change their diet. Dogs with more advanced disease can still go for walks, but do not overexert them; allow breaks and carry extra water if needed. Cats can be treated as normal at home.

Measuring your pet's **breathing rate** at home when sleeping is a useful guide to whether there is fluid build-up in the lungs. Less than 30 breaths per minute is ideal, but if it is consistently higher than this please contact us or your own vet. There is a useful **App** called **"Cardalis"** available free of charge for Apple and Android mobile devices which can help you to do this.

This is not generally a painful disease but breathlessness can be very tiring and distressing. Please contact your own vet immediately if your dog or cat develops sudden breathing difficulties, coughing, pale or blue-ish coloured gums or tongue, fainting or collapse. Your vet will be able to assess and stabilise your pet and can then contact us for advice.