

Heart Murmurs in Dogs and Cats

What is a heart murmur?

Lots of people assume that a 'heart murmur' is a disease or a diagnosis. This is not true – a heart murmur is *simply a noise* that your vet has heard through the stethoscope. It tells us that blood is not flowing smoothly through the heart for some reason and is making more noise than normal.

What causes heart murmurs ?

There are lots of different reasons why a cat or dog might develop a heart murmur. Some are caused by birth defects in the heart – e.g. 'Hole in the heart', and are often heard first in puppies or kittens when they have vaccinations.

Diseased valves in the heart tend to leak, and they make a noise which is heard as a heart murmur. This is quite common in older dogs and cats.

Heart muscle disease (so called 'Cardiomyopathy') can occur at almost any age in cats and dogs, and it tends to deform heart valves making them leak. This will, in turn, cause a heart murmur.

Some heart murmurs are termed 'innocent' or 'flow' murmurs. They are usually quite quiet and are not caused by any disease process, but are a variation of normal. The murmur is just the sound of blood flowing through the heart which in some individuals can be louder than others – particularly in thin fit animals such as greyhounds and lurchers.

Finally, heart murmurs can be caused by disease elsewhere in the body. For example, if a cat or dog does not have enough red blood cells (anaemia) then the blood can become very thin, and this can make more noise as it flows through the heart, causing a murmur to be heard.

What happens if my vet finds a heart murmur in my pet?

It is common for cats and dogs to have heart murmurs but no other signs at all. In this situation it is advisable to find out what is *causing* the murmur.

If the cause of the murmur can be found, then your vet can give you the best advice about management of any heart problem. *Pets with heart murmurs often need no medication*, especially if they are not showing any outward signs of disease.

Sometimes they do require treatment that can help prevent worsening of any disease process that is going on. For an accurate diagnosis, it is usually necessary to perform *ECHOCARDIOGRAPHY* – which is a complicated way of saying an ultrasound scan of the heart, which is the same sort of scan that humans have for pregnancy diagnosis. It is harmless to your pet, and only involves a little clipping of hair on either side of the chest low down so that the ultrasound probe can contact the skin. In most dogs sedation is not needed. Many cats can be successfully scanned without any sedative,

but they tend to be a bit more wriggly, and we sometimes find that a low dose of a sedative drug enables the cardiologist to get much more information from the scan.

Ultrasound means that we can look right inside your pet's heart. We can see the valves, heart muscle, blood vessels etc, and we can even measure blood flow in areas of the heart and see blood flowing in colour. This means that we can find the cause of the heart murmur in most cases, and the cardiologist can give you the best advice on management.

What other tests might my pet need?

Depending upon your individual pet, the heart rate, rhythm, pulse, loudness of murmur, breed, age etc, the cardiologist *may* advise other tests including:

1. Blood pressure – usually in older dogs, or cats with heart muscle disease, kidney problems, diabetes or thyroid problems.
2. E.C.G. – short for electro-cardio-gram. This looks at the electrical impulses that pass through the heart muscle as it beats and can be very useful for helping work out if there is any problem with the heart rhythm.
3. Blood tests – various tests can be useful – it is often useful to check that the rest of the body is working well, especially the kidneys and liver, before we dispense any drugs, and we can even find out if the heart muscle has been damaged.
4. X-rays - these are sometimes useful especially if there is evidence of coughing or breathing problems.

Does my pet have to have these tests?

No, not if you don't want to. Our job is to give you the best advice that we can and to try and make sure that we treat your pet with the correct drugs (or preferably no drugs if they are not necessary!). To do this, we need information. We get a lot of information from examining your pet in the consulting room, but often we need more. This is what these tests can provide, in a similar way to the advice you would be given if you went to see your GP who wanted to refer you to see a consultant for more tests.

What if I don't get the tests done?

Lots of pets can have a heart murmur for long periods of time, and some of them may never have any problems that relate to the heart murmur. If your pet is lucky, it may fall into this category and never have any problems. Unfortunately, we cannot always tell you this when we see your pet, simply because we don't have enough information to be able to tell. This is especially true in cats, as they can often seem absolutely fine one day, and suddenly go into a crisis in a very short space of time.

If you would like to speak to our cardiologist about your pet, please let your vet know, and they can arrange for him to contact you. That way, if you have any questions relating to your pet and any tests that we might have suggested, you can speak to him directly to answer your queries.

We hope this information leaflet helps!