# Cardiomyopathy in cats

Your cat has been diagnosed with, or is suspected to be affected by a condition called a 'cardiomyopathy', a disease of the heart muscle, stopping it functioning properly.

## What does a 'cardiomyopathy' mean and are there different kinds?

There are various categories of 'cardiomyopathy':

a) Dilated cardiomyopathy.
This describes a condition where the chambers in the heart become enlarged & the muscle wall weakens. The heart becomes weak, and is then unable to pump blood around the body in sufficient quantities, eventually resulting in heart failure.

b) Hypertrophic cardiomyopathy.
This is a condition where the heart muscle becomes thicker on the inside aspect of the wall, and is the commonest form in cats. The chambers in the heart become smaller and unable to accommodate the normal volume of blood. Less blood is then pumped out with every heartbeat, leading to heart failure. Some patients have widespread thickening to the heart muscle. Others may only have a focal thickening, but the location of this can have a big impact on cardiac dysfunction, such as if involving the part of the heart where blood leaves the heart, causing an obstruction to blood flow to the body (an obstructive HCM).

c) Restrictive cardiomyopathy.
This describes a condition where the heart muscle becomes fibrosed and brittle and can no longer expand in the normal way to allow the heart to fill with blood. This again reduces the heart's ability to function in pumping blood around the body.

## Why has my cat got this condition?

The exact cause of many cardiomyopathies is unknown. In people there are some known genetic mutations, but only a few have been identified in cats to date. Other diseases can sometimes contribute to the thickening of the heart in an HCM, such as high blood pressure, or an overactive thyroid gland. In many cases, the cause is not known, but your vet will suggest checking for a number of potential underlying conditions as your pet's heart function may deteriorate more quickly without addressing underlying triggers.

## How will you be able to tell if my pet has this condition?

A heart scan is a useful way to help distinguish between these conditions and can help choose if, and what drugs may be the most appropriate to help treat your pet's condition. It is important to be aware that in the majority of cases, the changes to your pet's heart

muscle cannot be reversed, but medication may be required to support your pet's cardiac function, and slow the progression into heart failure.

Blood sampling and blood pressure testing may be recommended to identify potential contributory diseases. If diagnosed, medical treatment of these can help reduce additional strains such conditions can place on the heart. For other levels of disease, treatment may not be required but close monitoring advised so treatment can be initiated when warranted.

In addition, your vet may recommend other tests to give more information about heart function, long term prognosis & choice of medications. Radiographs can assess if any fluid may have accumulated within lung tissue and your vet can advise whether this test is also recommended. The ultrasound examination performed to assess the heart will also have allowed your vet to assess whether any fluid has accumulated *around* (not within) the lungs or around the heart. This sequalae of heart dysfunction in cats will require drainage under sedation and ultrasound guidance before starting long term medication.

**<u>Will my pet need ongoing treatment?</u>**

Once on medication, most protocols require a long term commitment to administering tablets, and regular check ups. Although we hope that medication will give your pet a good quality of life for a considerable period of time, it is likely that his/her disease will progress. Your vet will be able to give you a better idea of prognosis following a heart scan and/or x-rays. However, it is important to remember that different patients' conditions may progress in different ways and it is impossible to make firm predictions.

**<u>Could my pet's condition get worse?</u>**

We hope of course that your pet will respond well to our treatments, but it may help for you to be aware of potential ways your pet's condition may progress. Progression to heart failure may result in breathlessness or coughing. This may require further medication, or should fluid build up in the chest around the lungs, your pet may require this to be drained under sedation. An embolism (blood clot) may form in the heart and at some point be dislodged and travel round the body to become stuck in a smaller blood vessel. This prevents blood reaching the tissues below the clot and commonly causes a cold, paralysed leg which is an emergency. Rarely, cardiomyopathy can result in sudden death.

There is a huge range of conditions that can affect the heart ranging from mild to severe, and it is important to remember lots of things can be done to try to reduce progression of your pet's condition. **Remember, if your pet shows signs of having difficulty breathing, or exhibits a cold paralysed leg, this is an emergency, please call if you have any worries.**