

Heart health and your cat

HYPERTROPHIC CARDIOMYOPATHY IN CATS (HCM)



1. What is HCM?

Feline Hypertrophic Cardiomyopathy (HCM) is the most common type of heart disease in cats causing the muscle of the heart to become thickened. There may be an underlying genetic cause in certain pedigree breeds such as Maine Coons, Ragdolls, British Shorthairs, Sphynxes, Bengals and Persians. However, many non-pedigree cats also get HCM and often the cause in these cats is unknown. Sometimes older cats can develop heart muscle thickening secondary to conditions such as high blood pressure or an over-active thyroid gland (hyperthyroidism).

2. What are the symptoms?

Cats with HCM can show different symptoms and life expectancy can vary depending on the severity and rate at which their heart disease progresses.



Cats with early or mild HCM can remain asymptomatic for months or even years if the disease progresses slowly. This stage is called **'asymptomatic' HCM**.

Once HCM is more advanced, affected cats will develop symptoms of fast or heavy breathing due to the accumulation of fluid within or around the lungs (this is called **congestive heart failure**). Some cats develop sudden paralysis of the hind legs due

to a **blood clot**, or they may collapse due to abnormal heart rhythms. This later stage is called **'symptomatic' HCM**.

If your cat is diagnosed with HCM and has no symptoms, it is important to be aware that HCM can progress and cause symptoms to develop later. Therefore, it is essential to monitor your cat closely with regular check-ups with your vet.

3. Do cats with HCM develop blood clots?

Some cats with HCM will develop blood clots in the heart, which can be pumped around the body where they can block blood vessels and stop blood flow. In cats, these blood clots most commonly block blood supply to the hind legs, causing pain and paralysis of either one or both hind legs. This is called an **aortic thromboembolism** and requires **emergency veterinary attention**.

4. How is HCM diagnosed?

If your vet detects a heart murmur or an abnormal heart rhythm and suspects HCM, they will typically recommend an ultrasound scan of the heart (an echocardiography). This is a completely painless procedure. Your cat will need to lie on their side and remain still, so a mild sedation can be given to help them relax. This sedation is especially chosen to be suitable for cats with heart disease. A patch of fur on both sides of your cat's chest needs to be clipped and some gel is applied to the skin so that the ultrasound image is clear. The whole procedure usually takes up to 60 minutes and your pet will be →



How can VVS help?

During a Virtual Veterinary Specialists (VVS) heart work-up your pet's heart is scanned by your vet together with an experienced VVS Cardiology Specialist. Your vet will let you know about any findings from the heart ultrasound and ECG. Your vet will explain the diagnosis and recommended treatment options, and talk you through your pet's prognosis, as well as any other tests, for example blood tests, that may be required. Your vet will also receive a full written report from the VVS Cardiology Specialist within a few days.

Your own vet will remain completely involved in your pet's care by working alongside a VVS Cardiology Specialist, and there is no need to travel to a referral centre, your pet is seen at your normal practice in familiar surroundings.



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 closely monitored throughout, including monitoring their heart rate and rhythm with an ECG.



Other tests may also be recommended such as chest x-rays (to assess for lung fluid), blood tests (for example, to monitor kidney and thyroid function and for proBNP which is a marker of heart disease) and blood pressure monitoring.

5. Can medications treat HCM?

Heart medications cannot prevent or reverse heart muscle thickening in genetic HCM. However, **medications may be able to decrease the risk of symptoms** developing, or to control any current symptoms and improve your cat's quality of life. Your cat may need a diuretic medication to reduce any fluid in the lungs and help them breathe more comfortably, or they may need medications to decrease the risk of blood clots forming in the heart. Medication can also be given to treat high blood pressure or an overactive thyroid gland if these conditions are diagnosed.

6. How will my pet's HCM be monitored?

It is very important to monitor your cat's **sleeping respiratory rate** (**SRR**) at home. Measure the SRR by counting the number of breaths your cat takes in one minute (please ask your vet for our SRR handout which may be helpful for you).

Normal SRR for cats is under 30 breaths per minute. Consistently increased SRR of over 35 breaths/min in cats with underlying heart disease can suggest that there is fluid in or around the lungs. Please contact your vet if your cat's SRR is consistently over 35 breaths/min or if you notice that your cat is working harder to breathe, as this is an emergency.

Your vet will recommend regular check-ups, blood tests and **follow-up heart ultrasounds** to monitor the progression of your cat's HCM. Sometimes medications may need to be adjusted as the heart disease progresses, so it is important to work closely with your vet to ensure your cat's quality of life is as good as it can be.

7. What is the prognosis?

The life expectancy for cats with HCM is variable. Cats with mild HCM often live normal lives for many years with no symptoms. However, HCM is typically progressive and your cat's life expectancy will be decreased if they develop laboured breathing due to fluid in or around the lungs or blood clots causing hind leg paralysis.■