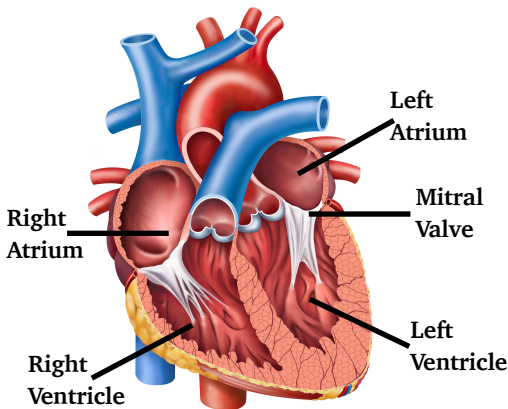


Hypertrophic Cardiomyopathy

Hypertrophic cardiomyopathy (HCM) is the most common heart disease diagnosed in cats. Any cat can be affected, but certain breeds such as Maine Coon, Ragdoll, Sphynx and Persian are at particularly high risk. HCM is usually caused by genetic abnormalities that cause thickening of the muscle fibers in the heart. Irregular heart rhythms (arrhythmias) are also frequently noted in these patients.

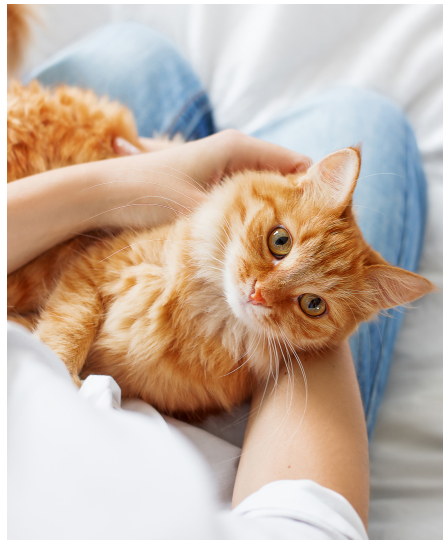


HCM causes thickening (hypertrophy) of the heart muscle. The left ventricle (LV) is most commonly affected. With HCM, the thickened heart muscle becomes stiff and cannot relax appropriately to allow filling of the LV. Eventually the left atrium will dilate as pressure builds up in the heart. The end-result is congestive heart failure (CHF) when fluid starts to accumulate in the lungs (pulmonary edema) or around the lungs (pleural effusion). Cats with dilated left atria are at risk of blood clot formation. These clots can dislodge and obstruct blood flow, usually in the back legs.

Physical examination can be normal in some cats with HCM but others will have abnormal heart sounds such as a murmur, gallop sound or arrhythmia. An **echocardiogram** (ultrasound of the heart) is a non-invasive test that allows us to look inside the heart and is the only way to diagnose HCM. Other tests that may be indicated for cats with HCM:

- ◆ Chest x-ray - to assess overall heart size and the lungs
- ◆ Electrocardiogram (ECG) - to assess electrical activity in the heart, particularly if there is an irregular heart beat (arrhythmia)
- ◆ Blood pressure - to determine if there is excess stress on the heart
- ◆ Blood tests such as a thyroid panel to look for other diseases that can cause thickening of the heart muscle

Treatment is not needed for all cats with HCM. Some cats will have a mild form and never need treatment. If hyperthyroidism or high blood pressure is present, treatment of these conditions can improve (or sometimes reverse) the thickening of the heart. Beta-blockers can be beneficial in a subset of cats with HCM with arrhythmias or obstructions in their heart. Plavix® can decrease the chances of clot formation. At the onset of CHF, diuretics (furosemide), ACE inhibitors (benazepril/enalapril) and pimobendan are used to relieve clinical signs and improve quality of life



QUICK FACTS:

- ♥ Hypertrophic cardiomyopathy (HCM) is the most common heart disease in cats
- ♥ 10-15% of cats are affected by heart disease
- ♥ HCM is mostly caused by genetic abnormalities, but hyperthyroidism and high blood pressure can also cause LV thickening
- ♥ Echocardiography is the gold standard for diagnosis and assessment of cats with HCM
- ♥ Plavix® has been shown to decrease the chances of blood clot formation in cats with heart disease
- ♥ Signs of CHF include difficulty breathing, decreased activity level, poor appetite, fainting
- ♥ Unfortunately some patients will die suddenly due to life-threatening arrhythmias