

# WHAT IS HCM?



## ABOUT THE DISEASE

**Hypertrophic Cardiomyopathy is the most commonly diagnosed disease in cats.**

HCM is characterized by abnormal thickening of the left ventricle (pumping chamber). When the left ventricle becomes severely thickened, it cannot fill properly. This results in increased pressure in the left ventricle, and enlargement of the left atrium (collecting chamber).

Many cats with HCM do not experience clinical problems. In some cats, HCM progresses slowly. Other cats may develop problems spontaneously, after steroids or IV fluid administration or following general anesthesia.

## Potential Complications of HCM

### CONGESTIVE HEART FAILURE (CHF)

Signs of CHF include increased respiratory rate or effort, lethargy, and decreased appetite. CHF can be managed with medications.

### AORTIC THROMBOEMBOLISM (ATE)

This occurs when a blood clot forms in an enlarged left atrium and embolizes (dislodges), most commonly to the hind limbs. The most common sign of ATE is the sudden inability to use the hind limbs.

*Sudden death is another potential complication of HCM*



## DID YOU KNOW?

Some breeds, such as Maine Coons and Ragdolls, are predisposed to Hypertrophic Cardiomyopathy. A genetic test is available in these breeds. However, HCM is also common in the Domestic Shorthair, also known as the average house cat.

# HOW WE DIAGNOSE & MONITOR HCM

## PHYSICAL EXAMINATION

Cats with HCM frequently (but not always) have a heart murmur. An arrhythmia (irregular heart rhythm) or gallop (extra heart sound) is sometimes detected. It is not possible to determine the severity of heart disease based on examination alone.

## ECHOCARDIOGRAPHY (HEART ULTRASOUND)

Echocardiography is the best test for HCM. It allows us to evaluate the thickness and function of the heart muscle, to assess the size of the left atrium, and to detect clot formation.

## THORACIC RADIOGRAPHS (CHEST X-RAYS)

Chest X-rays are often taken to look for evidence of congestive heart failure. Many cats with mild to moderate HCM will have relatively normal-looking hearts on X-ray.

## BLOODWORK & URINE TESTING

Full bloodwork and urine testing is recommended to assess for underlying diseases that can cause thickening of the heart muscle. These include hyperthyroidism and systemic hypertension related to kidney disease. BNP is a blood test that may be used to screen for heart disease and monitor progression of disease in some patients.

# FOLLOW-UP

Regular monitoring with echocardiography is recommended to detect progression of heart disease or evidence of clot formation in the left atrium.

*Additional tests may be recommended based on echocardiography assessment.*



# TREATMENT



In its early stages, HCM may only require monitoring. Based on the echocardiographic assessment, these medications may be prescribed.

## CLOPIDOGREL (PLAVIX)

Low molecular weight heparin can also be used to prevent clot formation. Enoxaparin is only available in injectable form. Some cats with HCM also have Systolic Anterior Motion (SAM) of the mitral valve. These cats may be prescribed a beta-blocker such as Atenolol.

## ENOXAPARIN (LOVENOX)

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## ATENOLOL (OR OTHER BETA-BLOCKER)

Plavix may be prescribed when the left atrium becomes enlarged due to increased risk of clot formation. Studies have shown that Plavix is more effective than aspirin at preventing clotting.

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