



Animal Emergency & Referral Associates

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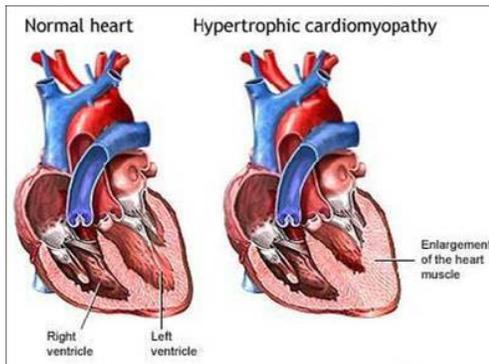
Heart Disease in Cats

Understanding heart disease in cats

Congenital heart disease in cats is relatively uncommon. The most common is the ventricular septal defect, or VSD. VSDs in cats are usually small and do not require treatment. **Acquired (becoming evident in adulthood) heart disease in cats** is fairly common and primarily involves disease of the myocardium, or heart muscle, itself. There are three distinct types of myocardial diseases recognized in cats:

Hypertrophic cardiomyopathy (HCM):

Hypertrophic cardiomyopathy is the most common type of heart disease in cats and is characterized by abnormal thickening of the walls of the heart's main pumping chamber, the left ventricle. The cause for this thickening is unknown but a genetic component has been identified in some pure-breed cats.



Some pure-breed cats are at increased risk for developing HCM, including:

- *Maine Coon*
- *Persian*
- *British Shorthair*
- *Norwegian Forest Cat*
- *Ragdoll*
- *Turkish Van*
- *Scottish Fold*

Restrictive cardiomyopathy (RCM): Restrictive cardiomyopathy can have a variable appearance, but is most commonly identified by the presence of significant scarring and fibrous (non-functional) tissue of the walls of the left ventricle.

Dilated cardiomyopathy (DCM): Dilated cardiomyopathy in cats is now considered rare and was associated with a deficiency of taurine prior to the 1980s. Incorporation of taurine into commercial cat foods has significantly reduced the occurrence of DCM in cats.

Consequences of heart disease in cats

The primary consequence of HCM and RCM is impairment of the heart's ability to relax and fill. This leads to circulatory congestion and cardiac chamber enlargement. There are three main problems your cat may develop secondary to these changes:

Congestive heart failure: Circulatory congestion in cats often leads to leakage of fluid into the lungs (*pulmonary edema*) or within the chest (*pleural effusion*), resulting in signs such as increased respiratory rate or effort, lethargy, and inappetance. (For

more information see our educational brochure *Heart disease and congestive heart failure*)

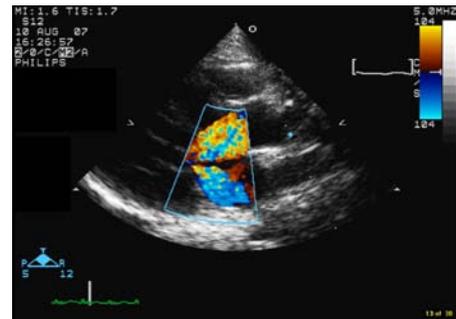
Thromboembolic disease (blood clots in circulation): Cats with heart disease can develop blood clots within their heart that can travel and lodge in peripheral arteries. The most common site is the hind legs, which can appear as sudden hind limb paralysis and distress. Clots can also travel to the front legs, brain, or internal organs.

Arrhythmias (abnormal heart rhythms): Disease of the heart muscle can lead to electrical instability and abnormal heart rhythms. These rhythms can be dangerous and sometimes lead to collapse or sudden death.

Diagnosis

If my cat has a heart murmur, does it automatically have heart disease?

No. Definitive diagnosis of heart disease in cats on physical examination alone is difficult. Heart murmurs in cats are divided into two categories: physiologic, or benign, murmurs, and murmurs associated with heart disease. Auscultation with a stethoscope cannot tell the difference between the two in most cases and an echocardiogram (cardiac ultrasound) is necessary for diagnosis. Some cats with heart disease will not have murmurs at all. Genetic blood testing for HCM is available for some pure breed cats.



Treatment

- Many cats with HCM will also have an obstruction to blood flow within their left ventricle, which can be treated with medications that slow the heart rate.
- Treatment of congestive heart failure involves primarily diuretics.
- Treatment of blood clots in cats generally involves anti-clotting medications, supportive care, and pain management.
- Treatment of significant arrhythmias is via antiarrhythmic medications.

Prognosis

- Prognosis for cats with asymptomatic heart disease is difficult to predict. Some cats will live years with disease without developing signs, while others will develop signs rapidly.
- Prognosis for cats with congestive heart failure is generally poor but varies based on response to therapy. Therapy often improves quality of life at home.
- Prognosis for cats with blood clots and arrhythmias is guarded because of the unpredictable risk of sudden death in these patients. Cats with blood clots have a high likelihood of clot recurrence if they survive the initial episode.