Hypertrophic cardiomyopathy (HCM) is the most common acquired cardiac disease in the cat. It can either be a primary disease or occur as a secondary disease process due to hyperthyroidism or systemic hypertension. Generally speaking, it tends to affect the middle age to older cat, but can be present in very young and very old cats. Clinical signs range from asymptomatic to sudden death. Feline aortic thromboembolism (FATE) is one presentation that is perhaps common to all, but is usually a result of end-stage HCM. Cats are exceedingly good at hiding any signs of heart failure, therefore when they present with signs of distress, they must be dealt using extreme caution.

HCM is a disease that is characterized by left ventricular hypertrophy. This causes stiffness of the heart muscle, which means that the ventricle cannot contract and relax as it should. The increased thickness also may exceed the myocardial blood supply, causing localized areas of ischemia. This further exacerbates stiffness and inefficiency of the ventricle. Some parts of the ventricle get thicker than others, and if the increased thickness occurs on the intraventricular septum, it can cause an outflow obstruction to the aorta (hypertrophic obstructive cardiomyopathy). This compromises cardiac output further, as the ventricle has to counter increased resistance. With either form of HCM, the left atrium may increase in size to try and accommodate the increased pressure in the ventricle. However, this almost inevitably leads to left-sided congestive heart failure.

Clinical signs are either found on routine examination when a new heart murmur is heard, or cats present in congestive heart failure. Signs can include tachypnoea, dyspnoea (if pulmonary oedema or pleural effusion are present), syncope (due to tachyarrhythmias or outflow tract obstruction) or with thromboembolism. Important things to remember are that cats do not cough with heart failure and they can also present with pleural effusion even with left sided congestive heart failure. Exercise intolerance is reported as another clinical sign, but this can be difficult to assess in the cat.

Cats with HCM can live for years with a heart murmur and with no progression of the disease. However, the disease can be life threatening, and stressed cats are even more likely to die suddenly. For those that present in distress,
the best approach is to provide oxygen and diuretics and let the cat settle in its new surroundings, before attempting diagnostic tests. Counting respiration effort and rate is as good as any method to see if the cat is responding to treatment. Thoracocentesis will assist if respiration is impaired by pleural effusion.