Hypertrophic Cardiomyopathy

Your cat has been diagnosed with a heart disease known as hypertrophic cardiomyopathy (HCM). The term cardiomyopathy is used to indicate a disease of the heart muscle as opposed to a disease involving other cardiac structures, such as valves.
HCM is one of the most frequently diagnosed heart diseases in the cat. It is often found in younger cats (as young as 3 months of age!) and as of now we ignore the reason why some cats develop HCM (it is genetic in some breeds and cats can be tested with a blood test). However, HCM can also be found in older cats where it is sometimes due to another condition such as hyperthyroidism, renal disease or high blood pressure. HCM received its name "hypertrophic" because the walls of one chamber of the heart, the left ventricle, are thickened. If only one wall of the left ventricle is thickened, we call this asymmetric hypertrophy. HCM results in increased stiffness of the heart muscle, which makes it less easy to fill the chambers with blood (diastolic impairment). This can produce fluid accumulation in the lungs and/or around the heart or chest cavity, and results in decreased oxygen availability.

Cats afflicted with this disease may have one or more of the following signs (some have none!):
- Labored breathing
- Distension of the abdomen/belly
- Weakness, lethargy, or exercise intolerance
- Loss of appetite
- Sudden weakness in the rear

Your veterinarian may have found one or more of the following signs:
- Heart murmur or "gallop rhythm"
- Harsh lung sounds
- Muffled heart and/or lung sounds
- Arrhythmia of the heart beat
- Absence of pulse in hind legs, or cold hind limbs
- Fluid in the chest, or belly
- "Valentine" heart on radiographs (X-rays)

The confirmation of the diagnosis can only be done by an echocardiogram ("echo") of the heart. With the help of the echo, we can determine the size of the walls and the chambers, and the heart's ability to contract. Fluid accumulation is also readily discernible (around the heart or in the chest cavity). On rare occasions, a blood clot (thrombus) is visible in the heart.

Unfortunately, we cannot cure HCM. The changes of the heart may be reversible only if it is secondary to another disease. Treatment is individualized depending on the severity and the underlying cause. In the early stages, either no treatment at all, a calcium-channel blocker (diltiazem) or a beta blocker given once/day may be all that's needed. These drugs will help "soften" the heart muscle, making pumping more efficient, and they may thin the heart wall over time. Sometimes, an ACE-inhibitor such as enalapril or benazepril is added which could also thin the walls, promotes some decrease in blood pressure and thus makes pumping easier on the heart. If heart failure is present, a diuretic such as lasix is needed. Some other drugs may have to be added if the disease progresses (i.e. a paste for the ears for easier breathing, cage rest, oxygen therapy, other therapies if blood clots form or arrhythmias develop).

The prognosis is highly variable and depends on the severity when your cat first presented. If caught early enough, your cat could live years with the disease, especially if you can medicate your pet. Please contact your veterinarian if you see any changes in your cat. An echocardiogram is advisable 3 - 9 months after starting therapy (depending on age and stage at initial diagnosis) to fine tune the medication and to have a better handle on prognosis, and after that about every 6 – 12 months. I know how precious your cat is to you and I hope that I will be able to treat him or her for many years to come!

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