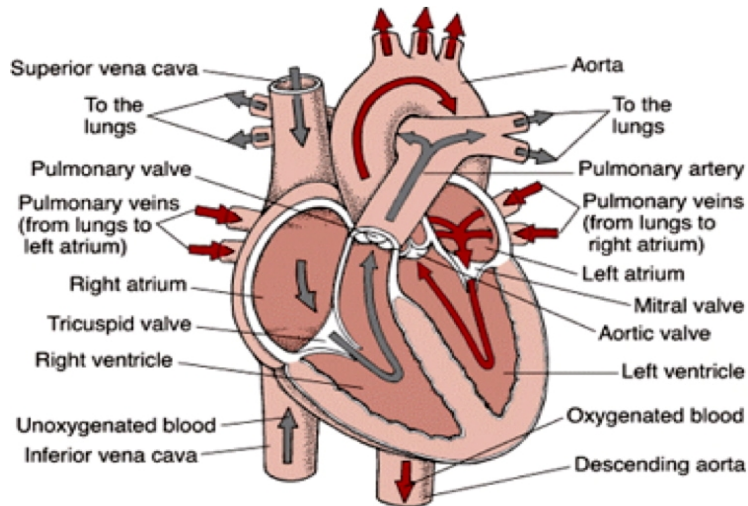


HYPERTROPHIC CARDIOMYOPATHY

OUTLINE OF A NORMAL HEART



Your cat has been diagnosed with Hypertrophic Cardiomyopathy (HCM). This is the most common heart disease seen in cats although it is relatively rare in the cat population as a whole. HCM is a disease that causes the heart muscle to abnormally thicken. The thickening primarily affects the left ventricular muscle and does so in a variety of patterns. Some cat's muscle is diffusely thickened while others only have focal areas of thickening. Regardless of which type your cat has, the end result can be the same.

In order for you to understand how this disease may affect your cat, it is important to understand how blood travels through the heart. The venous blood from the body drains into the right atrium, through the tricuspid valve, and into the right ventricle. The right ventricle then pumps this un-oxygenated blood to the lungs through the pulmonary artery. Moving through capillaries, the blood picks up oxygen from the lungs. This blood then drains through large pulmonary veins into the left atrium, through the mitral valve and into the left ventricle where it is pumped through the aorta and back to the body.

Many cats with HCM are only mildly affected and never experience clinical problems with the disease. However, some cats slowly progress over time. Unfortunately, it is impossible to tell which type an individual cat has. As the disease progresses, scar tissue replaces the thickened muscle. This muscle eventually becomes very stiff as well as too thick. This causes the filling pressure of the left ventricle to rise. Imagine pouring water into a thick and thin walled balloon. The thinner walled balloon is easily distensible and would fill readily. In order to fill the thick walled balloon, the water pressure would need to be turned up. This is analogous to a stiff left ventricle. Left atrial pressure must rise in order to fill it. This causes the left atrium to enlarge and the pressure to back up further into the lungs.

There are three potential outcomes to HCM.

1. Congestive Heart Failure (CHF). The most common outcome in cats with severe HCM. This can happen if the left atrial pressure is high enough to cause fluid to leak into the lungs.
2. Clot formation. An enlarged left atrium is unfortunately an ideal location for a blood clot to form. Once formed, it is often released into the blood stream and lodges in the blood supply to the hind legs. This causes acute hind limb paralysis.
3. Sudden death. This is a RARE but possible outcome.

If your cat has only mild disease, there is no risk of CHF or clot formation. The risk of sudden death is miniscule. If your cat has moderate or severe disease, there is risk for both CHF and clot formation although clot formation is less common. These cats should be monitored for any change in breathing (too fast or labored). If this occurs, a chest x-ray should be taken as soon as possible to evaluate for the presence of CHF.

Unfortunately, there is not a proven therapy available to slow progression of this disease. There are many medications that have theoretical basis in slowing progression. When and if CHF develops, there is medication to help in controlling it. Aspirin is prescribed when the left atrium becomes enlarged although it is not always efficacious in preventing clot formation. I will work closely with your doctor in developing the treatment plan best for your cat and your family. Most cats with this disease have an excellent quality of life and don't realize they are sick.

It is important to remember that many afflicted cats never develop problems with HCM. It is very important to monitor their echo so that if changes occur, appropriate therapy is prescribed.

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