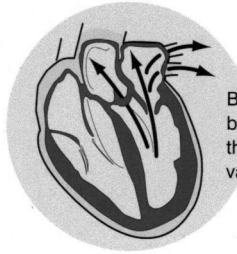


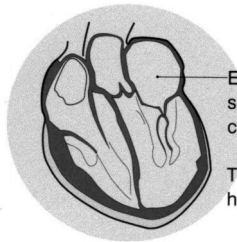
ProBNP Testing

Some types of heart disease are remarkably difficult to diagnose, especially in cats, yet heart disease is very common. 5 -15% of dogs and cats have heart disease. It's important to diagnose heart problems early for the best possible outcome and longest life expectancy. We have many medications for heart disease but we first have to recognize that a problem exists. A new blood test makes screening for occult (hidden) heart disease easier.



Blood backflow through valve

The most common types of heart disease in dogs are mitral valve insufficiency (MVI), where a valve inside the heart wears out; and dilatative cardiomyopathy (DCM), where the heart becomes dilated and flabby. Smaller breeds of dogs are more prone to valve disease and larger breeds are more likely to get DCM. The picture on the left shows a cross section of a heart that is mostly normal size and shape but with a bulge in the left atrium, at upper right in the picture, where the blood is backing up, causing the heart wall to stretch and bulge outward.



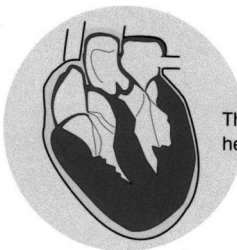
Enlarged spherical chambers
Thin/weak heart walls

The next picture on the left shows a heart with DCM. The heart is becoming larger and rounder while the thickness of the heart walls is decreasing. It is becoming a flabby, inefficient pump.

In dogs it can be difficult to tell whether symptoms such as coughing and shortness of breath are coming from heart or respiratory disease. Many small dogs with heart disease also have respiratory problems such as collapsing trachea. The new test, which measures the level of cardiac enzymes in the bloodstream, can help to

evaluate the severity of the heart problem so we can deliver appropriate treatment. It is also a good test to do annually for the specific breeds of dog that are prone to DCM, along with an electrocardiogram (ECG). Many dogs with

DCM will have an abnormal heart rhythm that will be seen on the ECG so we like to do both tests.



Thick heart walls

In cats, the primary heart problem we encounter is called hypertrophic cardiomyopathy or HCM. In this disease the heart muscle becomes abnormally thick and stiff (picture at left). As

the heart muscle thickens the chamber inside the heart that holds the blood shrinks. The heart has to work harder and harder to pump a smaller and smaller amount of blood.

This disease affects 1 in 6 cats to some degree. Many cats with HCM have heart murmurs that would indicate there is a problem but these murmurs are often soft and difficult to hear. 1/3rd of affected cats don't have a murmur at all.

