## HEART DISEASE IN DOGS

Heart disease in man is the leading cause of death in the U.S. Unfortunately; heart disease is also common in our pets. It occurs in 10% of all dogs, and 75% of dogs over 9 years of age. Many dogs with mild heart disease will never actually show symptoms of heart failure in

their lifetime. For those that do, there are effective medications available, so that dogs with heart failure can still live long and active lives.

The heart is a complex pump that is divided into four hollow and muscular chambers. Your dog's heart, although by no means fragile, is subject to two types of heart disease; congenital and acquired.

Congenital heart disease is caused by a malformation or defect present at birth. It is usually discovered quite early in a dog's life. Treatment often consists of surgery to repair the defect.

Acquired heart disease refers to any cardiac condition that develops after birth. It is most common in older dogs.

Most older dogs with heart failure suffer from valvular heart disease. One or more valves of the heart become thickened and distorted, often due to damage from bacterial infection. The valves then leak when the heart contracts, causing blood to be pumped in the wrong direction. A heart murmur can usually be heard with a stethoscope. This form of heart failure is especially common in small and toy breeds of dogs. Many times the bacteria that cause valvular heart disease get into the bloodstream via infected teeth.

Other forms of acquired heart disease include myocarditis and endocarditis, which are inflammation of the heart muscle or lining of the heart, respectively. These are most commonly caused by bacterial or viral infection. Heartworm disease, malfunction of the cardiac pacemaker and cardiomyopathy are other types of heart disease.

SYMPTOMS OF HEART FAILURE THE DOG OWNER CAN SPOT

An alert owner should keep an eye on the general condition of his or her dog to notice any changes in the animal's looks, eating patterns, activities and behavior. Certain signs warrant a call to the veterinarian because they may indicate a form of canine heart disease. These signs include:

- 1) Weakness and fatigue
- 2) Coughing, which usually occurs at night or in the early morning, and with excitement or exertion. It becomes more frequent as the disease progresses. White or blood-tinged phlegm may be expelled from the mouth.
- 3) Respiratory distress, panting, labored breathing or wheezing that sounds like asthma
- 4) Weight loss
- 5) Edema (collection of fluids), usually seen as a swelling of the abdomen or the feet
- 6) Cyanosis (bluish appearance of tongue and gums)

## SYMPTOMS THE VETERINARIAN CAN SEE

There are a number of signs of heart disease that can only be discovered through a veterinarian's examination. These include enlargement of the heart, abnormal cardiac sounds or murmurs, the enlargement of other organs, pulse abnormalities, abnormal rhythms and fluid buildup in the lungs. If a physical exam or sounds heard through the stethoscope indicate possible heart disease, further tests will be done to assess the problem. Your pet's blood pressure will need monitoring as well.

Radiography, or X-ray, allows the veterinarian to see cardiac enlargement, fluid in the lungs, or tumors. An electrocardiogram (EKG) provides information on the rhythm and conduction of the heart. Blood tests are often necessary as well, to assess the affects of the heart disease on other organs. An echocardiogram, which is an ultrasound scan of the heart, is often needed as well, especially as heart disease progresses and becomes more severe.

## PROGNOSIS IN HEART FAILURE

The prognosis (future outlook) in heart failure will depend on how early the dog was brought to the veterinarian for treatment and on the severity of the heart disease. A few causes of heart disease, such as acute infections, heartworm disease, trauma, or surgically correctable defects, can be cured. Usually, however, heart failure is incurable and progressive. Treatment will be essential for the rest of the dog's life. Though the disease cannot be cured, it can usually be managed, often for many years.

Therapy for heart failure may include diuretics, ACE-inhibitors, Pimobendan, bronchodilators, antiarrhythmics, sedatives, rest and a low-salt diet. Fish oil reduces inflammation of the heart valves and slows further damage.

## PREVENTION OF HEART FAILURE

Watching sodium intake is just as important in dogs as it is in people. Unfortunately, many commercial dog foods are loaded with excess salt because it acts as a flavoring and a preservative. As your dog ages, you may want to switch him to a diet lower in sodium and fat. Low salt and low fat diets include Hill's Canine Senior and Eukanuba Senior. Salt restriction does not prevent valve damage or heart muscle disease but it helps to reduce symptoms.

It is also very important to keep up with dental care as your pet ages, since dental infections are a primary cause and contributor of heart problems.

The good news is that with early detection and timely treatment, the majority of dogs with congestive heart failure (CHF) do very well and lead active, happy and even long lives. Quite often they die from old age or causes other than the heart failure itself. So be on the lookout for the early signs of heart disease. Don't assume that Fido tires easily now just because he's getting old. A simple change in diet or some daily medication may be all he needs to get back into the swing of things again!