What You Should Know About Chronic Valvular Disease

The heart has four chambers: two atria on the top of the heart and two ventricles on the bottom. There are four sets of valves in the heart: one at the bottom of each atrium that opens into the ventricle, and two controlling blood flow out of the ventricles. These valves function to direct blood through the heart so no backflow of blood occurs when the heart contracts.

Chronic valvular disease results in shrunken and distorted valves between the chambers of the heart. Consequently, the valves can't close properly and blood is ejected back through the valve instead of going to the lungs or body when the ventricles contract. The heart enlarges in an attempt to compensate for the overload of blood in the left ventricle and atrium. These changes take months to years to develop. Pets with chronic valvular disease often have congestive heart failure with fluid accumulation in the lungs, abdomen or both.

Causes
The cause of chronic valvular disease is the degeneration of the valve leaflets. However, why this occurs as your dog ages is currently unknown.
Diagnosis

Your veterinarian may detect a heart murmur in your pet years before congestive heart failure develops. The murmur is described as a regurgitation of blood through defective valves.

Auscultation of the chest (listening to it with a stethoscope) may reveal heart murmurs and the presence of fluid in the lungs. Feeling the chest and blood vessels may disclose the presence of unusual pulses. X-rays of the chest and abdomen are often taken to detect cardiac enlargement and fluid build-up. Blood pressure measurement may reveal hypertension (high blood pressure). ECGs show heart enlargement and disturbances in rhythms that may need treatment. Some practices use ultrasound to visualize the extent of damage to the heart structures. Blood tests – including tests for heartworms – and urinalyses are commonly performed to assess the effects of heart failure in other organs. Often these tests are repeated to monitor the effectiveness of therapy.

Treatment and Home Care

Treatment for chronic valvular disease isn’t curative, but can relieve the clinical signs of congestive heart failure in most patients. The overload of blood that the heart must pump can be lessened by low-sodium food, diuretics (which reduce the volume of blood) and by drugs that dilate blood vessels. Other therapies include enforced rest and drugs to control arrhythmias and strengthen and slow the heart.

Home care consists of giving all prescribed medications, monitoring your pet for the resolution of clinical signs and following your veterinarian’s instructions for proper food and exercise restriction. Some drugs that your veterinarian uses to treat heart disease may have side effects. Report any abnormal behavior – such as weakness, vomiting, or poor appetite – to your veterinarian at once. You will need to return to your veterinary practice for diagnostic tests that your veterinarian will use to check the effectiveness of therapy.

Nutritional Plan

If your pet has chronic valvular disease, your veterinarian may suggest a dietary change based on your pet’s age and body condition, clinical signs and on the presence or absence of disease in other organs and body systems. Many pets with congestive heart failure benefit from foods low in sodium. These foods reduce the workload of the heart by reducing fluid accumulation in the body. Foods with reduced sodium are useful for managing early heart failure. Such foods include Hill’s® Prescription Diet® h/d® Canine Cardiac Health or g/d® Canine and g/d® Feline Early Cardiac-Healthy Aging. Provide your pet with clean, fresh water at all times.

Transitioning Food

Unless recommended otherwise by your veterinarian, gradually introduce any new food over a seven-day period. Mix the new food with your pet’s former food, gradually increasing its proportion until only the new food is fed.

If your pet is one of the few that doesn’t readily accept a new food, try warming the canned food to body temperature, hand feeding for the first few days, or mixing the dry food with warm water (wait ten minutes before serving). Feed only the recommended food. Don’t feed additional salt or any snacks that may contain sodium. Be patient but firm with your pet. This is important because the success or failure of treatment depends to a large degree on strict adherence to the new food.

Home Care Instructions

Client’s Name: _________________________________________________________
Patient's Name: _________________________________________________________
Medication(s): _________________________________________________________
Nutritional Recommendation: ____________________________________________
Follow-Up Appointment: ________________________________________________  (Hospital Stamp Area Above)

REGULAR VISITS WILL HELP OUR VETERINARY HEALTH CARE TEAM PROVIDE FOR YOUR PET’S BEST INTEREST.