

Valvular Heart Disease in Dogs

Overview

Valvular heart disease (VHD) is a condition caused by the breakdown and thickening of the valves of the heart. In order to understand the impact of this disease, we need to look at the anatomy of your pooch's heart.

Your dog's heart, like yours, is a four-chambered pump made of muscle. The valves of the heart work to keep blood flowing in the correct direction. Normally, blood moves first into the atrium, the pump primer. The atrium contracts, pushing blood into the ventricle, which is the pump. Normal pump function requires that blood move always in this direction. However, with VHD, degenerative changes in the valve between the atrium and the ventricle cause it to become thick and distorted. As a result, the edges don't make a tight seal when the valve shuts and small amounts of blood leak from the ventricle into the atrium with each heartbeat. To compensate for this leaky valve, the heart has to pump more blood with each beat, causing the heart to enlarge over time. This extra work load causes the heart to become ineffective and unable to keep up with the body's demand for blood flow. This inability to supply the body with the blood it needs is known as **heart failure**.

VHD is a very common, progressive disease often found in older dogs; it affects breeds such as:

- Lhasa apsos
- Toy poodles
- [Yorkshire terriers](#)
- Cocker spaniels
- [Poodles](#)
- Chihuahuas
- Cavalier King Charles spaniels
- Schnauzers
- Small mixed-breeds

Symptoms

In the early stages of heart disease, your dog's body is able to make adjustments that allow her to cope with the disease. During this stage, your dog may show no visible signs of being sick. As time goes on and the valvular heart disease progresses, her body will no longer be able to make these adjustments. As a result, you may notice any of the following symptoms:

- [Coughing](#)
- [Difficulty breathing](#)
- Exercise intolerance
- Fainting
- [Pale gums](#)
- [Loss of appetite](#)

Diagnosis

Your veterinarian will perform a very thorough physical examination, which includes listening to your dog's heart.

Your veterinarian may also recommend the following to help diagnose your dog's condition:

- A radiograph, commonly known as an x-ray
- A blood test for a cardiac biomarker called NTproBNP
- A CBC and chemistry profile to assess your dog's overall health
- A blood pressure test
- An ECG (electrocardiograph) to record your dog's heart's electrical action
- An echocardiogram

Treatment

If your dog is diagnosed with valvular heart disease, your veterinarian may prescribe the following treatment:

- Nutritional modification, such as a low-sodium diet
- Diuretics, to help clear this excess fluid
- Regular but controlled daily exercise
- For advanced cases, drug therapy—these drugs that relax blood vessels and make it easier for the blood to circulate are often given once a patient develops the symptoms described above

Prevention

Unfortunately, VHD is a progressive disease that can't be prevented. Routine veterinary visits for your best friend can help identify heart conditions such as VHD in their earliest stages. To learn more about canine heart disease, visit the [Your Dog's Heart website](#).

If you have any questions or concerns, you should always visit or call your veterinarian – they are your

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best resource to ensure the health and well-being of your pets.