

Subaortic Stenosis

Subaortic stenosis (SAS) is a congenital defect that is usually present at birth. The aortic valve is located between the left side of the heart and the aorta. The stenosis is a narrowing of the area below the aortic valve (subaortic). This narrowing causes the left side of the heart to work harder to pump blood through the stenosis. As a result, the left heart becomes thickened.

SAS is inherited in some large breed dogs including: Golden Retrievers, Samoyed, German Shepherds, Boxers, Great Danes, Mastiffs, Newfoundlands, Rottweilers, Bull Terriers, and English Bulldogs.

In some dogs a murmur may be present as a puppy, in others, a murmur may not be diagnosed until after one year of age.

Symptoms

Dogs with mild SAS often have no symptoms. Dogs with severe SAS may have exercise intolerance, lethargy, collapse, fainting, increased respiratory rate and/or effort, heart arrhythmias or sudden death.

Diagnoses

A cardiac ultrasound (echocardiogram or echo) will let the cardiologist assess the structure and function of the heart. Often times with SAS cardiac arrhythmias are present. An electrocardiogram (ECG) looks at the electrical activity of the heart and will diagnose any arrhythmias.

Treatment

Dogs with severe SAS may be started on Atenolol therapy. Serial Echocardiograms may be required to follow progression of disease. Severe SAS can cause sudden death from fatal cardiac arrhythmias. Medical management can be used to help control these arrhythmias. Serial recheck ECGs may need be performed to ensure adequate arrhythmia control.