

Atrial Fibrillation

Atrial Fibrillation (a-fib, or AF) is an irregular heart rhythm that can present in one of two ways:

- 1) Enlargement of the upper heart chambers (atria) due to severe underlying heart disease (most commonly mitral regurgitation or dilated cardiomyopathy)
- 2) Lone a-fib, which means the heart structure is normal and only the arrhythmia is present. Lone a-fib is usually found in large and giant breed dogs (Great Danes, Irish Wolf Hounds, Newfoundlands).

Symptoms

Atrial fibrillation can cause lethargy and/or exercise intolerance, but does not always result in specific symptoms. It can be detected by a veterinarian on routine physical exam during auscultation, when a fast, irregular heartbeat is heard. If the a-fib is caused by underlying heart disease the pet will most likely show symptoms of congestive heart failure which includes coughing, labored breathing, exercise intolerance or fainting.

Diagnosis

An electrocardiogram (ECG) records the electrical impulses within the heart, and is required to diagnose atrial fibrillation. Once a-fib has been diagnosed, an ultrasound of the heart (echocardiogram or echo) is typically recommended to look for evidence of cardiac disease. An echo allows the cardiologist to assess the structure and function of the heart. This will determine if the a-fib is being caused by underlying heart disease. If heart disease is present, chest x-rays may be indicated to check for fluid in the lungs (pulmonary edema).

A Holter monitor may also be indicated to assess the arrhythmia over a 24-hour period, and make sure that additional underlying arrhythmia (such as ventricular arrhythmia) is not present. This small device has leads that are attached to electrodes and placed on the pet's chest. The monitor records the ECG while the pet goes about their daily routine at home. The recording will help the cardiologist determine how severe the arrhythmia is and which

antiarrhythmic medication(s) should be started. A recheck Holter monitor may be recommended a few weeks after starting antiarrhythmic medications to ensure adequate control of the arrhythmia.

Treatment

Medications that slow the heart rate are used to manage a-fib. If underlying heart disease is present, medications for the heart disease and the arrhythmia may be prescribed. Managing and controlling arrhythmias can be a bit frustrating. Each pet has different needs and will require medical management tailored to their condition. Serial ECGs, Holter monitors and echocardiograms will be required to help cardiologist properly manage disease progression and the arrhythmia.