



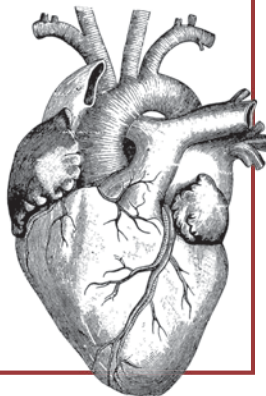
What is Atrial Fibrillation?

— THE NORMAL HEART —

The heart is a large muscle with four chambers. There are left and right top chambers (called “atria”) and left and right bottom chambers (called “ventricles”). Poorly oxygenated blood flows from the right side of the heart, to the lungs, and then back to the left side of the heart as well-oxygenated blood, which is then delivered to the body.

The heart muscles contract after they are stimulated by an electrical impulse. A small area of special tissue in the right atrium called the sinus node starts an electrical impulse that will eventually travel down specialized electrical tracts. The sinus node controls the heart rate.

The electrical impulses cause the heart to contract in a coordinated fashion: the atria contract first and push blood into the ventricles; then the ventricles contract and push blood to either the lungs or the rest of the body. This electrical impulse can be recorded on an electrocardiogram (ECG or EKG).



ABOUT THE DISEASE

Atrial fibrillation—sometimes called “AFib” or “AF”—is a type of irregular heart rhythm that affects the atria of the heart.

Instead of the sinus node starting the electrical signal, the atria develop the ability to send out electrical impulses on their own.

These rapid and disorganized impulses cause the atrial muscle to quiver, or fibrillate, instead of contracting in an organized, structured fashion. A specialized region of tissue between the atria and ventricles, called the AV node, is able to filter some of these impulses. However, in AFib, an unusually high number of impulses pass through this filter, and they occur in a fast and irregular pattern.

HOW WE DIAGNOSE & MONITOR AF

During a physical examination, your vet may hear a fast and irregular heart rhythm and recommend further tests.

ELECTROCARDIOGRAM (ECG or EKG)

Atrial Fibrillation is diagnosed by performing an electrocardiogram (ECG or EKG).

ECHOCARDIOGRAM (HEART ULTRASOUND)

Typically, an echocardiogram will also be recommended to determine whether there is any evidence of structural disease.

HOLTER MONITOR

A Holter monitor (24-hour ECG) may also be recommended to better assess your pet's rhythm and heart rate over the course of the day, as well as to assess efficacy of treatment.



TREATMENT

The goal of treatment is to lower the fast heart rate associated with AF.

In some cases, medical treatment can also result in a return to a normal (sinus) rhythm.

In most cases, with regular check-ups, atrial fibrillation can be well managed and most pets can still maintain a good quality of life.

ELECTROCARDIOVERSION

In some cases, especially when structural disease is not present, electrocardioversion may also be considered. The purpose of electrocardioversion is to send electrical energy to the heart in order to convert the irregular rhythm back to a normal (sinus) rhythm.

Commonly Prescribed Medications

Amiodarone
Diltiazem
Atenolol
Sotalol
Digoxin



DID YOU KNOW?

AF usually accompanies structural disease. Common heart diseases associated with AF are severe mitral regurgitation and dilated cardiomyopathy.

In giant breeds such as Great Danes and Irish Wolfhounds, AF can occur without underlying heart disease. This is called "lone" Atrial Fibrillation.



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