

ATRIAL FIBRILLATION (AF)

What is it?

Atrial fibrillation (AF) is an irregular and often rapid heart rate that occurs when the two upper chambers of the heart (the atria) beat out of coordination with the two lower chambers (the ventricles). This can lead to poor blood flow and increase the risk of stroke and heart failure.

What causes it?

Atrial fibrillation can be caused by several factors, including high blood pressure, heart attacks, coronary artery disease, abnormal heart valves, congenital heart defects, and metabolic imbalances like an overactive thyroid. It can also result from exposure to stimulants, such as caffeine or alcohol, or as a complication of heart surgery.

What are the symptoms?

Symptoms of atrial fibrillation may include:

- Palpitations, or sensations of a racing, uncomfortable, irregular heartbeat or a flip-flopping in your chest.
- Weakness and fatigue.
- Reduced ability to exercise.
- Lightheadedness or dizziness.
- Shortness of breath.
- Chest pain.

What are the preventive measures?

Preventive measures include maintaining a healthy weight, exercising, avoiding excessive alcohol and caffeine, not smoking, and controlling high blood pressure, cholesterol, and diabetes.

How is it diagnosed?

Diagnosis involves a physical exam, ECG, Holter monitor, event recorder, echocardiogram, blood tests, and chest X-ray.

How is it treated?

Treatment for atrial fibrillation includes:

- Medications such as anticoagulants to prevent blood clots, antiarrhythmics to restore normal heart rhythm, and beta-blockers or calcium channel blockers to control heart rate.
- Electrical cardioversion to reset the heart's rhythm using electric shocks.
- Catheter ablation to destroy areas of the heart causing the irregular rhythm.
- Pacemaker or implantable cardioverter-defibrillator (ICD) for severe cases.
- Lifestyle changes to reduce AF triggers.