



# An Overview of Heart Failure and Atrial Fibrillation

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### DESCRIPTION

Atrial Fibrillation (AF or A-fib) is a type of arrhythmia (abnormal heart rhythm) characterized by rapid and irregular beating of the blood's ventricular cells. It frequently begins with shorter time of abnormal beating that gradually become longer or continuous. It can also proceed as another type of arrhythmia, such as atrial flutter, and then progress to atrial fibrillation. Asymptomatic incidents are possible. Symptoms include increased heart rate, dizziness, light-headedness, shortness of breath, and chest pain. Atrial fibrillation increases the risk of heart failure, dementia, and cerebrovascular disease. It is classified as supraventricular tachycardia.

The most common risk factors for atrial fibrillation are high blood pressure and valvular heart disease. Heart failure, coronary artery disease, cardiomyopathy, and congenital heart disease all are risk factors for heart disease. Valvular heart disease is frequently caused by rheumatic fever in low- and middle-income countries. Depression, overweight, and sleep apnea all are risk factors for respiratory disease. Other risk factors include excessive alcohol consumption, tobacco use, metabolic disorders, and thyroid disease. After experiencing the pulse, health professionals can assume AF and establish the diagnosis by interpreting an electrocardiogram. A typical atrial fibrillation ECG exhibits irregularly arranged frequency components with no Primary waves.

#### Symptoms atrial fibrillation

Some people with Atrial fibrillation (A-fib) are asymptomatic. Those who have atrial fibrillation symptoms can sometimes experience the signs and symptoms: Fluttering, or pounding heartbeat sensations (palpitations), chest pain, and lightheadedness, decreased ability to exercise, breathing difficulty, and weakness.

#### Causes of atrial fibrillation

The most common cause of atrial fibrillation is structural high blood pressure. Atrial fibrillation can be caused by a wide range of factors, which include: Coronary Artery Disease (CAD), and heart attack. Person was born with a heart defect (congenital heart defect). Heart valve difficulties, blood pressure is high, lung disorders, Surgery, pneumonia, or other illnesses can cause physical stress and cardiovascular surgery. A problem with the natural pacemaker of the heart (sick sinus syndrome), thyroid disease, such as hyperthyroidism (overactive thyroid), and other metabolic difficulties, Sleep apnea, types of drugs, such as certain medications, caffeine, tobacco, and alcohol, are commonly used infections caused by viruses, and some people with atrial fibrillation have recognised heart problems or damage to their hearts.

### Risk factors of atrial fibrillation

The following factors can increase the risk of Atrial fibrillation (A-fib).

**Age:** The risk is the possibility of developing atrial fibrillation advancing age.

Heart disease: Person with a heart condition, such as heart valve problems, congenital heart disease, congestive heart failure, coronary artery disease, or a history of a heart attack or cardiac surgery, is at risk of developing atrial fibrillation.

**High blood pressure:** High blood pressure, particularly if it is not well controlled through lifestyle modifications or medications, can increase the risk of atrial fibrillation.

Thyroid disease: Thyroid issues can cause heart rhythm problems (arrhythmias), including atrial fibrillation, in some people.

Other chronic health conditions: Individuals who suffer from diabetes, metabolic syndrome, chronic kidney disease, lung disease, or sleep apnea are highly possible to develop atrial fibrillation.

**Drinking alcohol:** Drinking alcohol can cause an incident of atrial fibrillation in some people. Alcohol consumption raises the risk.

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**Obesity:** Obese people are at a higher risk of developing atrial fibrillation.

**Family history:** Some families are preconditioned to atrial fibrillation.

## Complications of atrial fibrillation

Blood clots are a potentially fatal complicating factor of atrial fibrillation. The chaotic heart rhythm of atrial fibrillation can

cause blood to collect in the upper chambers of the heart (atria) and form clots. If a pulmonary embolism in the left upper chamber (left atrium) breaks free from the heart area, it can travel into the brain and cause a stroke. Other health conditions that can increase the risk of a stroke as a result of A-fib include: Blood pressure is high, diabetes, cardiovascular disease, and some cases of valvular heart disease.