

An Overview on Atrial Fibrillation

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Introduction

Atrial fibrillation (AF or A-fib) is an abnormal cardiac rhythm (arrhythmia) in which the atrial chambers of the heart beat rapidly and irregularly. Short episodes of irregular heartbeat are common at first, but they might become longer or persistent over time. It can also begin as another type of arrhythmia, such as atrial flutter, and subsequently progress to AF. Asymptomatic episodes are possible. Heart palpitations, fainting, light headedness, shortness of breath, or chest pains are examples of symptomatic episodes. A higher risk of heart failure, dementia, and stroke is linked to atrial fibrillation. Supraventricular tachycardia is a kind of tachycardia.

Description

The most frequent modifiable risk factors for AF are high blood pressure and valvular heart disease. Heart failure, coronary artery disease, cardiomyopathy, and congenital heart disease are among the other heart-related risk factors. Rheumatic fever is a common cause of valvular heart disease in low- and middle-income nations. COPD, obesity, and sleep apnea are all lung-related risk factors. Excessive alcohol consumption, tobacco smoking, diabetes mellitus, and thyrotoxicosis are all risk factors. However, only around half of the instances are linked to any of the aforementioned dangers. After feeling the pulse, healthcare practitioners may suspect AF and confirm the diagnosis with an electrocardiogram (ECG). In AF, an ECG with unevenly spaced QRS complexes and no P waves is usual.

Weight loss in obese persons, increasing physical activity, and drinking less alcohol are all healthy lifestyle modifications that can lessen the chance of atrial fibrillation and its severity if it occurs. Medications to reduce the heart rate to a near-normal range (known as rate control) or to convert the rhythm to normal sinus rhythm are commonly used to treat AF (known as rhythm control). Electrical cardio version can restore normal cardiac rhythm in people with AF, and it's typically needed in an emergency if they're in danger. In some cases, ablation can prevent recurrence. Although some healthcare practitioners may give aspirin or an anti-clotting drug for patients at low risk of stroke, AF does not always necessitate blood-thinning.

Atrial fibrillation is the most frequent significant irregular heart rhythm, affecting around 33 million people globally as of 2020. As of 2014, it afflicted around 2% to 3% of Europe's and North America's population. Around 2005, this percentage increased from 0.4 to 1% of the population. About 0.6 percent of males and 0.4 percent of females in underdeveloped countries are impacted. With age, the percentage of people with AF rises, with 0.1 percent under 50 years old, 4% between 60 and 70 years old, and 14% over 80 years

old affected. In 2015, 193,300 people died from a-fib and atrial flutter, up from 29,000 in 1990. In 1749, Jean-Baptiste de Sénac made the first documented report of an erratic pulse. In 1909, Thomas Lewis was the first clinician to use an ECG to document this. [1-3]

AF is frequently accompanied by signs of a fast heart heartbeat. Rapid and irregular heart rates can create palpitations (the sensation of the heart pounding excessively rapidly, erratically, or skipping beats) or exercise intolerance, and they can also cause anginal chest discomfort (if the heart's demand for oxygen exceeds the supply of accessible oxygen (ischemia)). Congestive heart failure symptoms such as weariness, shortness of breath, and edoema are also possible. An abnormal heart rhythm (arrhythmia) is sometimes only discovered after a stroke or a transient ischemic event has occurred (TIA). Because AF rarely causes symptoms, it is normal for a person to learn about it during a routine physical examination or EKG. [4, 5]

Conclusion

Because the majority of occurrences of AF are caused by other medical issues, symptoms such as chest discomfort or angina, signs and symptoms of hyperthyroidism (an overactive thyroid gland), such as weight loss and diarrhoea, and symptoms suggestive of lung illness can all point to a possible underlying cause. A history of stroke or transient ischemic attack, as well as high blood pressure, diabetes, heart failure, or rheumatic fever, can all suggest if someone with AF is at risk of complications.

References

1. Luft, Friedrich C. "Twins in cardiovascular genetic research." *Hypertension* 37(2001): 350-356.
2. Fagard, Robert, Jana Brguljan, Jan Staessen and Lutgarde Thijs et al. "Heritability of conventional and ambulatory blood pressures: a study in twins." *Hypertension* 26(1995): 919-924.
3. Surendran, Praveen, Fotios Drenos, Robin Young and Helen Warren et al. "Trans-ancestry meta-analyses identify rare and common variants associated with blood pressure and hypertension." *Nat. Genet* 48(2016): 1151-1161.
4. Ehret, Georg B., Teresa Ferreira, Daniel I. Chasman, Anne U. Jackson et al. "The genetics of blood pressure regulation and its target organs from association studies in 342,415 individuals." *Nat. Genet* 48 (2016): 1171-1184.
5. Liu, Chunyu, Aldi T. Kraja, Jennifer A. Smith and Jennifer A. Brody et al. "Meta-analysis identifies common and rare variants influencing blood pressure and overlapping with metabolic trait loci." *Nat. Genet* 48(2016): 1162-1170.

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