

Heart Arrhythmia: An Overview

Xiaofeng Chen*

Department of Cardiology, Taizhou Hospital Affiliated to Wenzhou Medical University, Linhai, Zhejiang Province, China

Perspective

An irregular heartbeat is known as a cardiac arrhythmia. When the electrical signals that coordinate the heart's beats don't work properly, heart rhythm issues (heart arrhythmias) arise. The heart beats too rapidly (tachycardia), too slowly (bradycardia), or irregularly due to improper signalling. Heart arrhythmias can cause a fluttering or racing sensation in the chest and are usually harmless. However, some heart rhythms may create uncomfortable — occasionally even life-threatening — signs and symptoms.

It is, however, sometimes normal for a person's heart rate to be rapid or sluggish. For example, during exercise, the heart rate may increase, whereas during sleep, it may decrease. To manage or eradicate fast, slow, or irregular heartbeats, medicines, catheter procedures, implanted devices, or surgery may be used. A heart-healthy lifestyle can aid in the prevention of cardiac damage that can lead to arrhythmias.

Types of heart arrhythmias

Heart arrhythmias are classified based on the rate at which the heart beats. Consider the following scenario:

- A rapid heart is referred to as tachycardia. The average resting heart rate is over 100 beats per minute.
- Bradycardia is a sluggish heartbeat. A resting heart rate of less than 60 beats per minute is considered normal.

Fast heartbeat (Tachycardia)

Types of tachycardia include:

- **Atrial fibrillation:** It is a condition in which the heart beats irregularly (A-fib). A fast, uncoordinated heart rate is caused by chaotic cardiac signals. Although the ailment may be transitory, certain A-fib episodes cannot be stopped unless they are treated. A-fib is linked to catastrophic consequences such as stroke.
- **Fluttering of the atrium:** A-fib is comparable to atrial flutter, but the heartbeats are more structured. Stroke has also been associated to atrial flutter.
- **Supraventricular tachycardia:** Is a type of tachycardia that

occurs when the heart rate is Supraventricular tachycardia refers to arrhythmias that originate above the lower heart chambers (ventricles). Supraventricular tachycardia is characterised by short bursts of hammering heartbeat (palpitations).

- **Ventricular Fibrillation:** Is a condition in which the heart beats irregularly. When rapid, chaotic electrical signals force the lower heart chambers (ventricles) to quiver instead of connecting in a coordinated fashion that pumps blood to the rest of the body, this form of arrhythmia occurs. If a normal heart beat isn't restored within minutes, this critical condition can lead to death. The majority of persons who develop ventricular fibrillation have a heart condition or have been in a traumatic accident.
- **Tachycardia in the ventricles:** Faulty electrical signals in the lower heart chambers cause this rapid, regular heart beat (ventricles). The ventricles are unable to fill correctly due to the fast heart rate. As a result, the heart is unable to adequately pump blood throughout the body. In persons who have a healthy heart, ventricular tachycardia may not create any complications.

Slow heartbeat (Bradycardia)

Although bradycardia is defined as a heart rate of less than 60 beats per minute while at rest, a low resting heart rate does not usually indicate a problem. If you're physically healthy, your heart may be able to pump enough blood to the body while resting at less than 60 beats per minute.

You may have a type of bradycardia if your heart rate is slow and your heart isn't pumping enough blood. The following are examples of bradycardias:

- **Sinusitis is a condition in which the sinuses become inflam:** The sinus node is in charge of controlling the heart's rate. The heart rate may oscillate between too slow (bradycardia) and too fast (tachycardia) if it isn't working properly (tachycardia). Scarring at the sinus node can produce sick sinus syndrome by delaying, interrupting, or stopping impulse travel. Sick sinus syndrome is most common in people over the age of 50.
- **Blocking the flow of information:** The signals that trigger heartbeats can slow down or halt if the heart's electrical circuits are blocked. Some blockages cause no indications or symptoms, while others induce skipped beats or other problems.

How to cite this article: Chen, Xiaofeng. "Heart Arrhythmia: An Overview." *J Cardiovasc Dis Diagn* 9 (2021): 483.

*Address for Correspondence: Xiaofeng Chen, Department of Cardiology, Taizhou Hospital Affiliated to Wenzhou Medical University, Linhai, Zhejiang Province, China, E-mail: chenx@gmail.com

Copyright: © 2021 Chen X. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 05 October 2021; **Accepted** 19 October 2021; **Published** 26 October 2021