

A brief note on heart rhythm and arrhythmias

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Description

The heart's normal rhythm is called sinus rhythm. Its rate is between 60 and 100 beats per minute (bpm) while you're resting. If the sinus rhythm is slower than 60 bpm, then it's called sinus bradycardia. In a normal cardiac rhythm, a small cluster of cells at the sinus node sends out an electrical signal. The signal then travels through the atria to the cardiac muscle then passes into the ventricles, causing them to contract and pump out the blood. An arrhythmia describes an irregular heartbeat. With this condition, a person's heart may beat too quickly, too slowly, too early, or with an irregular rhythm. Arrhythmias occur when the electrical signals that coordinate heartbeats aren't working correctly. An irregular heartbeat may desire a racing heart or fluttering. Many heart arrhythmias are harmless. However, if they're highly irregular or result from a weak or damaged heart, arrhythmias can cause severe and potentially fatal symptoms and complications. There are several categories of arrhythmia like: Bradycardia or a slow heartbeat, Tachycardia or a fast heartbeat, Irregular heartbeat, also referred to as a flutter or fibrillation, early heartbeat or a premature contraction.

Most arrhythmias aren't severe and don't cause complications. Some can increase the danger of stroke or asystole. Some people may hear doctors use the word "dysrhythmia" when concerning their irregular heartbeat. The words arrhythmia and dysrhythmia mean the same, but the word arrhythmia is more prevalent. Heart rhythm problems or heart arrhythmias occur when the electrical impulses that coordinates your heartbeats don't work properly, causing your heart to beat too fast, too slow or irregularly. Heart arrhythmias may desire a fluttering or racing heart and should be harmless. However, some heart arrhythmias may cause bothersome sometimes even life-threatening signs and symptoms. Heart arrhythmia treatment can often control or eliminate fast, slow or irregular heartbeats. In addition, because troublesome heart arrhythmias are often made worse are even caused by a weak or damaged heart; you may be able to reduce your arrhythmia risk by adopting a heart-healthy lifestyle. Heart is formed from four chambers two upper chambers (atria) and two lower chambers (ventricles). Your cardiac rhythm is generally controlled by a natural pacemaker (sinus node) located within the right atrium of the heart. The sinus node produces electrical impulses that normally start each heartbeat. These impulses cause the atria muscles to contract and pump blood into the ventricles. The

electrical impulses then reach a cluster of cells called the atrioventricular (AV) node. The AV node slows down the electrical signal before sending it to the ventricles. This slight delay allows the ventricles to fill with blood. When electrical impulses reach the muscles of the ventricles, they contract, causing them to pump blood either to the lungs or to the rest of the body. In a healthy heart, this process usually goes smoothly, leading to a traditional resting pulse of 60 to 100 beats a moment.

Types of Arrhythmia

Doctors classify arrhythmias not only by where they originate (atria or ventricles) but also by the speed of pulse they cause:

- Tachycardia: This refers to a quick heartbeat, a resting pulse greater than 100 beats a moment.
- Bradycardia: This refers to a slow heartbeat, a resting pulse but 60 beats a moment.

Not all tachycardias or bradycardias mean you've got heart condition. For example, during exercise it's normal to develop a quick heartbeat because the heart accelerates to supply your tissues with more oxygen-rich blood. During sleep or times of deep relaxation, it isn't unusual for the heartbeat to be slower.

Symptoms of Arrhythmia

Arrhythmias may not cause any signs or symptoms. In fact, your doctor might find you've got an arrhythmia before you are doing, during a routine examination. Noticeable signs and symptoms don't necessarily mean you've got a significant problem. Noticeable arrhythmia symptoms may include: A fluttering in your chest, a racing heartbeat (tachycardia), a slow heartbeat (bradycardia), Chest pain, Shortness of breath. Other symptoms may include: Anxiety, Fatigue, Lightheadedness or dizziness, Sweating, Fainting (syncope) or near fainting.

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