

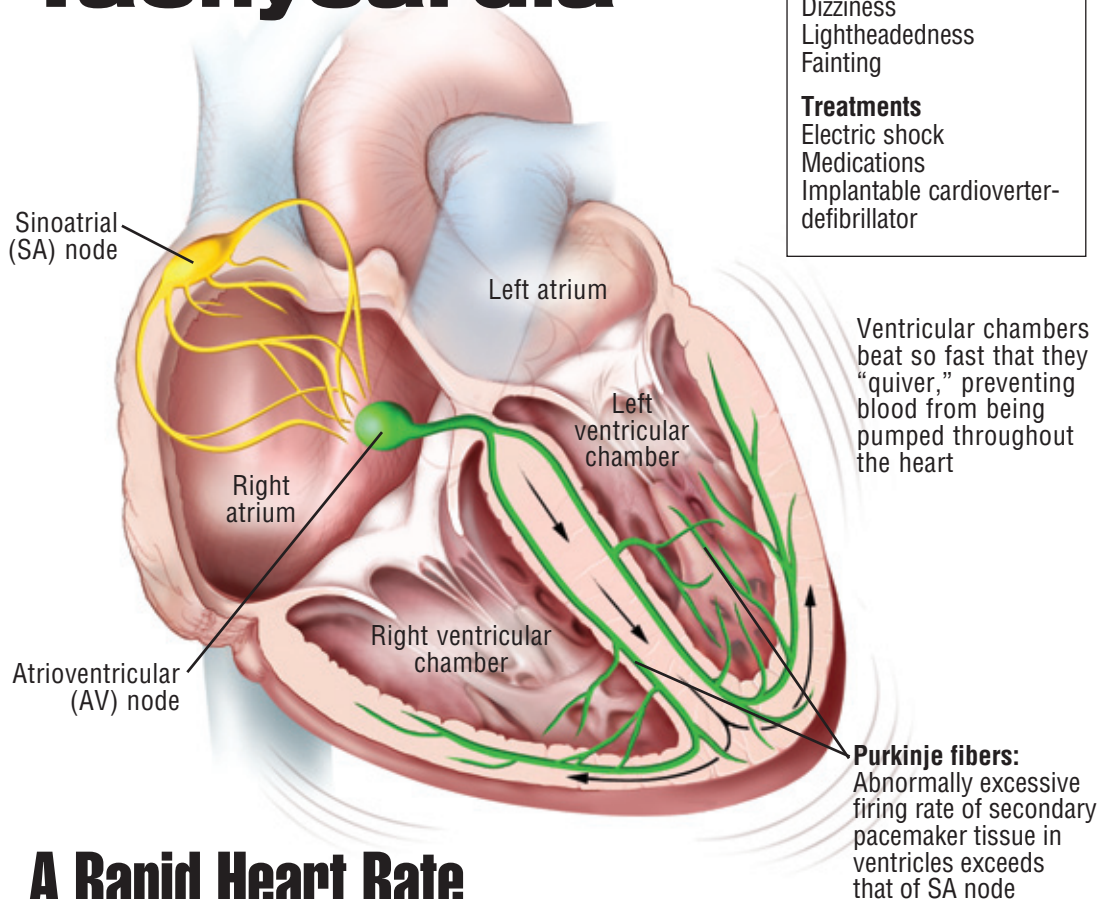
# Ventricular Tachycardia

## Symptoms of tachycardia

Extreme palpitations  
Dizziness  
Lightheadedness  
Fainting

## Treatments

Electric shock  
Medications  
Implantable cardioverter-defibrillator



## A Rapid Heart Rate

A normal heart pumps blood at a regular rate and rhythm, called sinus rhythm. This rhythm is set by electrical impulses transmitted to the atria, the smaller upper chambers of the heart, and then to the ventricles, the larger, lower chambers of the heart. These electrical impulses result in a heartbeat, which allows the ventricles to pump blood throughout the body.

Any time the normal electrical impulses through the heart are disrupted, an abnormal heart rhythm can develop. An abnormal heart rhythm is called an arrhythmia. Many times these abnormal rhythms are brief and do not significantly affect the overall rate or rhythm of the heart. When the arrhythmia continues for some time, however, the heart may not beat regularly and blood is not pumped efficiently throughout the body.

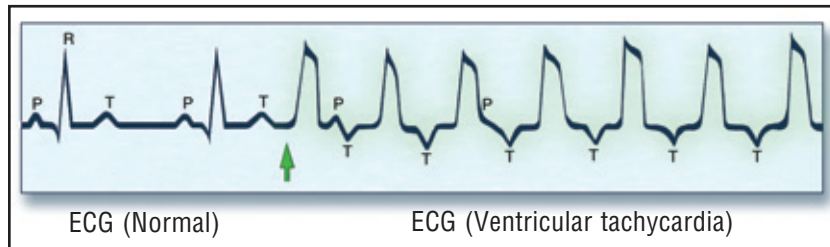
If the rate of the heart speeds up, the arrhythmia is called tachycardia. There are two types of tachycardia, supraventricular and ventricular. In supraventricular tachycardia, the fast heart rate starts in the atria and treatment is aimed at slowing the heart rate. In ventricular tachycardia, the fast heart rate begins in the ventricles. It may last only a few seconds, in which case it is not dangerous. However, if ventricular tachycardia continues longer, it is considered a medical emergency. The heart beats in a regular pattern, but so rapidly (up to 200 beats per minute) that it can no longer pump blood effectively. Ventricular tachycardia can also cause the heart to beat in an irregular manner, and the ventricles begin trembling instead of pumping blood. This condition is known as ventricular fibrillation, a potentially fatal situation that must be treated immediately. Electrical shock treatment with a defibrillator can convert the heart rate and rhythm back to normal.

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TEAR ALONG PERFORATION

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Whenever the heart rate increases to faster than 100 to 200 beats per minute, symptoms of tachycardia can develop. Ventricular tachycardia can be fatal and should be treated aggressively.

## Fast Heart Rhythm That Originates in the Ventricles

An arrhythmia (abnormal heart rhythm) is more likely to develop in people who already suffer from heart disease, especially coronary heart disease or a prior heart attack. Arrhythmias can also be caused by intense stress or the use of stimulant drugs such as amphetamines, cocaine, and caffeine. A person may be genetically prone to arrhythmias, or may be more likely to develop arrhythmias due to obesity, diabetes, thyroid disease, or imbalances in electrolytes such as potassium, calcium, sodium, and magnesium.

### Symptoms of Tachycardia

Whenever the heart rate increases to faster than 100 beats per minute, symptoms of tachycardia can develop. The more common symptoms are dizziness, fainting, chest pain, palpitations (“skipped beats”), and a sensation of a fast pounding of the heart. Although many people experience a rapid heartbeat or palpitations occasionally, these are usually not serious.

Some people with arrhythmias have no symptoms at all, and their abnormal rhythm is discovered in the doctor’s office during a routine electrocardiogram (ECG) test. A portable Holter monitor, a commonly used test to diagnose arrhythmias, records the heart’s electrical activity for 24 hours or up to several weeks. The doctor may suggest using an event monitor that the patient activates during symptoms of the arrhythmia to see if there is a connection between the sensation and an abnormal heart rhythm.

### Treatment Options

The goal of treatment of a supraventricular arrhythmia, which originates in the atria of the heart, is to slow the heart rate down and allow it to resume a normal rhythm. Sometimes the doctor may recommend activities that slow the vagal nervous system, which controls the heart rate. These activities include coughing, straining, or holding your breath. Drugs used in these patients include beta-blockers and antiarrhythmic drugs. Another treatment for supraventricular arrhythmias, called *radiofrequency ablation*, permanently treats the arrhythmia by destroying the area of tissue in the heart that is causing the abnormal electrical impulses.

Ventricular tachycardia, a rapid heart rate of up to 200 beats per minute, is treated aggressively because it can be fatal. Electroshock defibrillation must be administered to a patient with this type of arrhythmia very quickly after it develops. If ventricular tachycardia becomes a chronic problem, an implantable cardioverter-defibrillator can be used to deliver an electric shock whenever it is needed to convert the heart to normal sinus rhythm.

If you have questions about arrhythmias or medications prescribed to treat tachycardia, be sure to ask your pharmacist.