

SUPRAVENTRICULAR TACHYCARDIA (SVT)

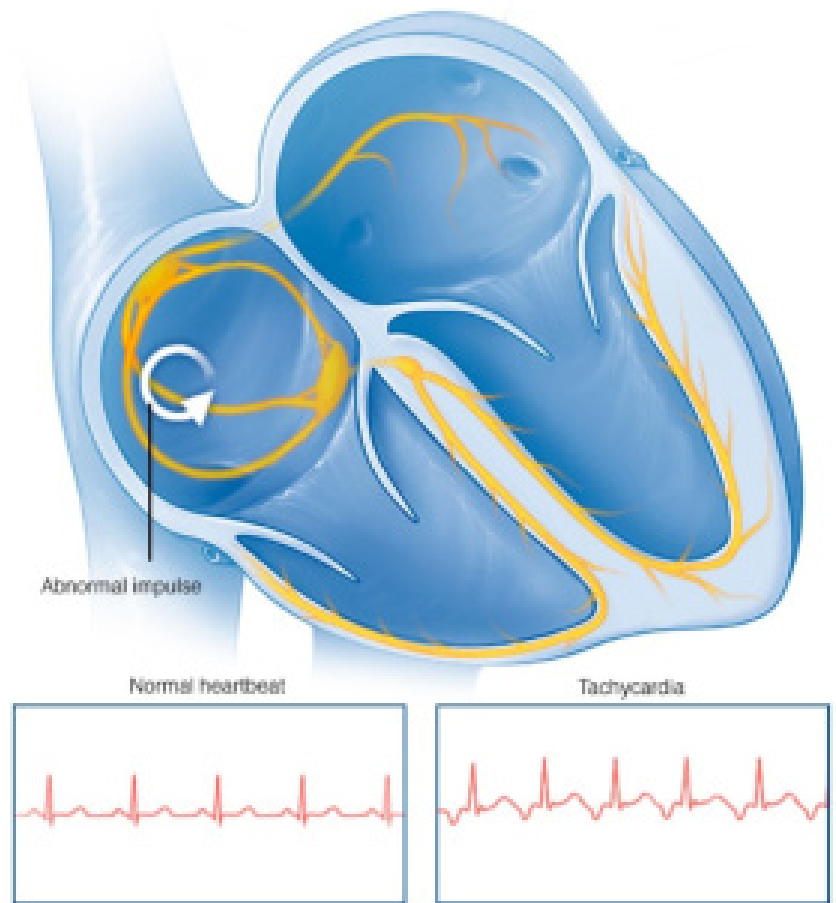
Supraventricular tachycardia, most commonly referred to as SVT, includes multiple different forms all with similar symptoms. The most common types of SVT are atrioventricular nodal reentrant tachycardia (AVNRT), atrioventricular reentrant tachycardia (AVRT) and atrial tachycardia (AT).

Normal conduction of the heart begins at the Sinoatrial (SA) node, then after travelling through the atria (upper chambers of the heart), travels through the Atrioventricular (AV) node to the ventricles (lower chambers of the heart).

The type of SVT is classified based on the path of electrical signal during the tachycardia. SVT begins in the upper chambers of the heart, (Atria), and can travel to the lower chambers of the heart (ventricles) through a variety of normal and abnormal electrical pathways.

Atrial tachycardia:

- During atrial tachycardia, an electrical impulse outside the sinus node fires repeatedly, in a circular electrical pathway. Electricity circles the atria again and again, causing the upper chambers to contract rapidly. This results in rapid conduction through the AV node to the lower chambers resulting in a rapid heart rate



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AVNRT (Atrioventricular Nodal Reentrant Tachycardia)

AVNRT is the most common type of SVT. People with AVNRT have episodes of fast heart rates that start and stop suddenly. The episodes are due to an extra electrical pathway called a reentrant circuit located in or near the AV node that causes the heart to beat prematurely

Wolf-Parkinson-White Syndrome (WPW)

An accessory pathway between the atria and ventricles that bypasses the AV node, resulting in a fast heart rate is known as Wolf-Parkinson-White Syndrome.

Symptoms and Signs

- Palpitations- the feeling of a rapid, fluttering or erratic heartbeat
- Dizziness
- Fainting (syncope)
- Chest pain
- Shortness of breath
- Heart pounding
- Feeling pulsations in your throat
- Sudden sense of a fast heart rate and a sudden end to the fast heart rate

These symptoms can be brief but can also last for hours.

Treatment

- **Vagal Maneuvers:** You may be able to stop an episode of SVT by using particular maneuvers. These include holding your breath, coughing, bearing down, or splashing ice cold water on your face.
- **Medications:** If your episodes of SVT are frequent, your doctor may prescribe medication to control your heart rate.
- **Cardioversion:** If Medications or vagal maneuvers are unsuccessful and your heart rate persists at a rapid rate for an extended period of time, your doctor may advise a cardioversion. This is a brief electrical shock applied externally through pads applied to your chest that restores your heart to a normal rhythm.
- **Catheter Ablation:** This is an outpatient procedure done by your cardiologist during which the doctor will thread a catheter from the vein in your groin to your heart. The doctor uses heat energy (radiofrequency) to create an area of scar tissue to block the abnormal electrical signal that is causing your arrhythmia.

Treatment is individualized and your doctor will advise what treatment he thinks is most appropriate for you.