Tachycardia

Treatments and drugs

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The treatment goals for tachycardias are to slow a fast heart rate when it occurs, prevent future episodes and minimize complications.

Stopping a fast heart rate

A fast heartbeat may correct itself, and you may be able to slow your heart rate using simple physical movements. However, you may need medication or other medical treatment to slow down your heartbeat. Ways to slow your heartbeat include:

Vagal maneuvers. Your doctor may ask you to perform an action, called a vagal maneuver, during an episode of a fast heartbeat. Vagal maneuvers affect the vagus nerve, which helps regulate your heartbeat. The maneuvers include coughing, bearing down as if you're having a bowel movement, and putting an icepack on your face.

- Medications. If vagal maneuvers don't stop the fast heartbeat, you may need an injection of an antiarrhythmic medication to restore a normal heart rate. An injection of this drug is administered at a hospital. Your doctor may also prescribe a pill version of an anti-arrhythmic drug, such as flecainide (Tambocor) or propafenone (Rythmol), to take if you have an episode of a fast heartbeat that doesn't respond to vagal maneuvers.
- **Cardioversion.** In this procedure, a shock is delivered to your heart through paddles or patches on your chest. The current affects the electrical impulses in your heart and restores a normal rhythm. It's typically used when emergency care is needed or when maneuvers and medications aren't effective.
- Preventing episodes of a fast heart rate

With the following treatments, it may be possible to prevent or manage episodes of tachycardia.

• Catheter ablation. This procedure is used most often when an extra electrical pathway is responsible for an increased heart rate. In this procedure, catheters are threaded through the blood vessels to your heart. Electrodes at the catheter tips can use heat, extreme cold, or radiofrequency energy to damage (ablate) the extra electrical pathway and prevent it from sending electrical signals. This procedure is highly effective, especially for supraventricular tachycardia. Catheter ablation can also be used to treat atrial fibrillation and atrial flutter.

Medications. Anti-arrhythmic medications may prevent a fast heart rate when taken regularly. Other medications that may be prescribed — either as an alternative or in combination with anti-arrhythmic medications — are calcium channel blockers, such as diltiazem (Cardizem) and verapamil (Calan) or beta blockers, such as metoprolol (Lopressor, Toprol) and esmolol (Brevibloc).

- Pacemaker. A pacemaker is a small device that's surgically implanted under your skin. When the device senses an abnormal heartbeat, it emits an electrical pulse that helps the heart resume a normal beat.
- Implantable cardioverter-defibrillator. If you're at risk of having a life-threatening tachycardia episode, your doctor may recommend an implantable cardioverter-defibrillator (ICD). The device, about the size of a cell phone, is surgically implanted in your chest. The ICD continuously monitors your heartbeat, detects an increase in heart rate and delivers precisely calibrated electrical shocks to restore a normal heart rhythm.
- Surgery. Open-heart surgery may be needed in some cases to destroy an extra electrical pathway. In another type of surgery, called the maze procedure, a surgeon makes small incisions in heart tissue to create a pattern or maze of scar tissue. Because scar tissue doesn't conduct electricity, it interferes with stray electrical impulses that cause some types of tachycardia. Surgery is usually used only when other treatment options don't work or when surgery is needed to treat another heart disorder.

Preventing blood clots

Some people with tachycardias have an increased risk of developing a blood clot that could cause a stroke or heart attack. Your doctor may prescribe a drug-thinning medication, such as dabigatran (Pradaxa) and warfarin (Coumadin) to help lower your risk.

Treating an underlying disease

If another medical condition is contributing to tachycardia — for example, some form of heart disease or hyperthyroidism — treating the underlying problem may prevent or minimize tachycardia episodes.