

## **Arrhythmia: A Problem With Your Heartbeat**

### **What is an arrhythmia?**

An arrhythmia is a change in the rhythm of your heartbeat. When the heart beats too fast, it's called tachycardia. When it beats too slow, it's called bradycardia. An arrhythmia can also mean that your heart beats irregularly, that it skips a beat or has an extra beat. At some time, most of us have felt our heart race or skip a beat. These occasional changes can be brought on by strong emotions or exertion and are usually not a cause for alarm. Arrhythmias that occur more often or cause symptoms (see below) may be more serious and need to be discussed with your doctor.

### **What causes an arrhythmia?**

The heart has four chambers. The walls of the heart contract to push blood through the chambers. The contractions are controlled by an electrical signal that begins in the heart's "pacemaker" (called the sinoatrial node). The rate of the contractions is influenced by nerve impulses and hormones in the blood. A problem in any of these can cause an arrhythmia.

Minor arrhythmias may be brought on by excessive alcohol intake, smoking, caffeine, stress and exercise. However, the most common cause of arrhythmias is heart disease, particularly coronary artery disease, abnormal heart valve function and heart failure. Sometimes, arrhythmias occur for no known reason.

### **What are the symptoms of arrhythmia?**

Call your doctor if you have any of these symptoms, especially if you have heart disease or have had a heart attack.

- Palpitations or rapid thumping in your chest
- Feeling tired or light-headed
- Passing out
- Shortness of breath
- Chest pain

### **Is an arrhythmia serious?**

In most people, arrhythmias are minor and are not dangerous. A small number of people, however, have arrhythmias that are dangerous and that require treatment. Arrhythmias are also more serious if you have other heart problems. In general, arrhythmias that start in the lower chambers of the heart (called the ventricles) are more serious than those that start in the upper chambers (called the atria). Your doctor will talk with you about the type of arrhythmia you have and whether you need treatment.

### **How are arrhythmias diagnosed?**

Your doctor will ask if you have any of the symptoms listed in the box below. Your doctor may also do some tests. One of these tests is an electrocardiogram, also called ECG or EKG. During this test, your doctor will have you lie down so your heart can be monitored. Your doctor may also ask you to walk on a treadmill while he or she monitors your heart.

Your doctor may also want to monitor your heart while you do your daily activities. One way to do this is to have you wear a Holter monitor for 24 hours. If your doctor wants to monitor your heart for more than 24 hours, he or she might recommend an event-recorder, which you wear for a couple of days or longer. Other tests, called electrophysiologic studies, may also give your doctor information about your heart.

### **What are some of the types of arrhythmias?**

- **Atrial fibrillation.** The heart beats too fast and irregularly. This type requires treatment and can increase your risk of stroke.
- **Paroxysmal atrial tachycardia.** The heart has episodes in which it beats fast but regularly. This type may be unpleasant but usually is not dangerous.
- **Ectopic beats.** The heart has an extra beat. Treatment is usually not needed unless you have several extra beats in a row and/or other problems with your heart.
- **Ventricular tachycardia and ventricular fibrillation.** The heart beats too fast and may not pump enough blood. These types are very dangerous and need immediate treatment.

### **What's the treatment?**

Treatment depends on the type of arrhythmia you have. Some mild arrhythmias require no treatment. Others can be treated with medicines. If another condition or problem is causing the arrhythmia, treatment is aimed at taking care of that problem. In more serious cases, other treatments are available:

- An artificial pacemaker is an electronic device placed under the skin on the chest. It helps the heart maintain a regular beat, especially when the heart's beat is too slow.
- Cardiac defibrillation (very brief shock) can be used to stop an abnormal rhythm and restore a normal one.
- Surgery can correct certain types of arrhythmias. For example, arrhythmias caused by coronary artery disease may be controlled by bypass surgery. When an arrhythmia is caused by a certain area of the heart, sometimes that part of the heart can be destroyed or removed.

For more information

American Heart Association  
800-AHA-USA1 (800-242-8721)

National Heart, Lung, and Blood Institute  
301-251-1222