



Heart Arrhythmias

MU Patient Education Series

Definition:

A heart arrhythmia is an abnormal heart beat or rhythm. With this condition, the electrical impulses that coordinate your heartbeats do not work properly. This malfunction causes your heartbeats to be too quick, too slow or irregular. Some heart arrhythmias are unnoticeable, while others cause heart fluttering and dizziness. With proper care and treatment, heart arrhythmias can be controlled and even abolished.

CAUSES:

When your heart beats, electrical impulses are fired. These impulses are monitored and controlled by a natural pacemaker found in your sinuses. This natural pacemaker is called the SA node (sinotorial node). A heart arrhythmia occurs when this natural pacemaker develops an abnormal pace or rhythm, is blocked or interrupted, or another part of your heart attempts to take over the role of pacemaker. When any of these events occurs, your heart begins to acquire an irregular beat. In normal, healthy hearts, there are usually 60 to 100 beats per minute. Individuals with hear arrhythmias often have hearts that beat well over 100 beats per minute, or below 60 beats per minute. The events that cause heart arrhythmias can be triggered by a number of factors. Some of these factors include:

- Substance abuse
- Diabetes
- High blood pressure
- Smoking
- Coronary artery diseases that block the blood vessels that carry blood and oxygen to your heart
- Change to the structure of your heart
- Stress
- Dietary supplements and herbal treatments
- Various medications
- Unhealthy sinus node
- Blockage of the electrical pathways



WHO IS AT HIGH RISK FOR HEART ARRHYTHMIAS?

There are certain factors that make some individuals more prone to acquiring heart arrhythmias. Some of these factors include:

- Coronary artery diseases
- Other heart conditions
- Substance abuse
- Thyroid issues
- High blood pressure
- Being overweight or obese
- Diabetes
- Old age
- Caffeine or nicotine use
- Sleep apnea

The majority of these factors can be controlled and even avoided or eliminated completely. If you manage your risk factors and maintain a healthy lifestyle, you will be on the way to avoiding irregularity in your heart beat!

SIGNS/SYMPTOMS:

The symptoms of a heart arrhythmia can vary greatly. You may feel a slight fluttering in your chest or neck, a single skipped heart beat, or you may even feel nothing at all. If the arrhythmia endures long enough to interfere with your heart's normal pattern, it may be difficult to disperse blood through your body. When this occurs, symptoms such as the following may arise:

- Exhaustion
- Fluttering in your chest
- Chest pain
- Shortness of breath/difficulty breathing
- Lightheadedness
- Dizziness
- Fainting
- Slow heart beat
- Fast heart beat

Regardless of the severity of your case of arrhythmia, these symptoms may or may not arise. You may feel every symptom, or you may feel none at all. Be sure to stay aware! The majority of arrhythmia cases are harmless, but some are extremely dangerous and require immediate treatment and care. It is



essential to stay proactive and to ask questions! Pay attention to your heart and your symptoms and be sure to keep your physician updated!

DIAGNOSIS/TESTS:

If you are experiencing any of the aforementioned symptoms, call your healthcare provider. The earlier you catch a heart arrhythmia, the better. If you catch it early, you are more likely to experience a speedy and effective recovery. When you see your physician, be sure to be as honest as possible when answering questions. The more honest you are the better diagnosis and treatment you will receive. After a standard physical examination, your physician will likely perform a variety of diagnostic tests. These may include:

- A test that monitors the electrical impulses of your heart (electrocardiogram, EKG)
- A test that monitors your heart's activity throughout a 24-hour period (Holter® monitor)
- A CT or MRI scan to observe images of your heart
- A stress test that is used to observe your heart rate while the heart is working
- A tilt table test
- A test that follows the electrical system of your heart (electrophysiologic studies)

Your general physician may suggest that you visit a heart specialist, called a cardiologist. Cardiologists specialize in conditions such as heart arrhythmias. They may have an easier time locating your problem.

TREATMENT/CARE:

Often treatment for heart arrhythmias is not required. Sometimes, a healthy lifestyle is the only alteration needed to avoid further heart problems. In some cases, the condition and its symptoms are severe enough to require a more thorough treatment. Some treatment methods include:

- A pacemaker to regulate your heartbeat
- Medications to control and prevent arrhythmias
- Surgery
- Medications that lessen your chance of blood clots and strokes (anticoagulants)
- Ablation therapy that inserts catheters into your heart
- Implantable cardioverter-defibrillator (ICD) to control a fast or quivering heartbeat
- Medication to treat conditions such as high blood pressure, high cholesterol and heart failure

It is essential that regardless of your form of treatment, you follow your care plan exactly.



PREVENTION:

The key to preventing and controlling a heart arrhythmia is living a heart healthy lifestyle. Some fundamental aspects of a heart healthy life include:

- Maintain a healthy diet
- Maintain a healthy weight
- Quit smoking cigarettes
- Avoid substance abuse
- Limit your caffeine consumption
- Control blood pressure and cholesterol levels
- Stay physically active
- Find ways to reduce the amount of stress in your life

These healthy heart suggestions will not only keep your heart as healthy as possible, but your whole body healthy. Following this fairly simple plan will aid in maintaining a healthy heart and help to prevent heart arrhythmias.

CALL YOUR HEALTHCARE PROVIDER IF:

Remember that the symptoms of heart arrhythmias are not always clear! It is essential to stay aware and pay attention to your heart and your body and to alert your physician of any changes. It is crucial that if you feel any of the following symptoms to call your physician immediately:

- Shortness of breath
- Wheezing
- Weakness
- Exhaustion
- Fainting or near fainting
- Lightheadedness
- Chest pain or discomfort
- Dizziness

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