What is an arrhythmia?
An abnormal heart rhythm, or arrhythmia, is a change in the pace or pattern of the heartbeat. This change in pace, during an arrhythmia, is considered either too fast or too slow.

**What symptoms may I experience?**

Sometimes arrhythmias can go unnoticed, and other times you will experience a skipping or fluttering sensation in the chest. It may cause you to feel light-headed, shortness of breath, or even faint.

**Is an arrhythmia serious?**

An arrhythmia becomes serious when the irregular heart beat effects the heart’s function of pumping blood. When the heart can’t effectively pump blood, there can be life threatening results. It is important to discuss your symptoms with your doctor. Your doctor can perform diagnostic tests to determine if an arrhythmia is causing your symptoms.

If an arrhythmia is causing your symptoms, your doctor will likely prescribe medication first. If the medications do not help you, your doctor may recommend an ablation procedure to treat the arrhythmia.
Types of arrhythmia

What are the different types of arrhythmias?

**Bradycardia**
The heart beats slower than normal.

**Tachycardia**
Abnormally fast heart rate.

**Supraventricular Tachycardia (SVT)**
A series of very rapid heartbeats that begin in the upper chambers (atria) of the heart.

**Atrio-Ventricular Nodal Reentry Tachycardia (AVNRT)**
A form of SVT, where an accessory pathway allows electrical impulses to travel in a circular pattern and the heart may contract with each rapid cycle.

**Atrio-Ventricular Reentrant Tachycardia (AVRT) or Wolff-Parkinson-White Syndrome (WPW)**
An accessory pathway (bridge) makes it possible for electrical impulses to travel from the atria to the ventricles without going through the typical pathway.

**Atrial Fibrillation (AF)**
Upper chambers of the heart (atria) beat rapidly and in an uncontrolled manner (fibrillation).

**Atrial Flutter**
Upper chambers of the heart (atria) beat rapidly but more organized than in atrial fibrillation.

**Ventricular fibrillation**
The heart’s lower chambers (ventricles) quiver and can’t contract or pump blood to the body.

**Ventricular Tachycardia (VT)**
Abnormal electrical pathways exist in the lower chambers of the heart (ventricles) causing rapid contractions.
Arrhythmia treatments

PHARMACOLOGICAL

- Anticoagulants: reduce blood clotting and prevent stroke.
- Cardioversion: this treatment can be pharmacological (implemented through fast-acting medications).
- Rate control: beta blockers, calcium channel blockers and cardiac glycosides.
- Rhythm control: antiarrhythmics.

NON-PHARMACOLOGICAL

- Devices: an implantable cardioverter-defibrillator (ICD) is inserted into the patient’s chest like a pacemaker.
- Cardioversion: this treatment can be electric (implemented through a direct current using paddles placed on the chest).
- Catheter ablation: a non-surgical technique that destroys parts of the abnormal electrical pathway (tissue), which is causing the arrhythmia.
- Surgery: an invasive procedure where surgeons will remove abnormal sites (tissue) in the heart that are causing the arrhythmia.
Arrhythmia treatments

Heart surgery
A procedure where surgeons will remove abnormal sites (tissue) in the heart that are causing the arrhythmia.

Antiarrhythmic medications
These medications help prevent abnormal electrical conduction in the heart’s accessory pathways and therefore, rapid or irregular heart beats. Medications are frequently used as the first treatment for rapid heart rhythms.

Catheter ablation
Catheter ablation is a minimally invasive procedure that is performed by an Electrophysiologist who uses a thin catheter to map where the abnormal electrical signals that trigger an arrhythmia originate in your heart. Guided by this map, the Electrophysiologist places a catheter into your heart to pinpoint the source of the abnormal electrical signals.

Once the source of your arrhythmia is located, a therapeutic catheter transmits energy to produce a small scar on the targeted part of your heart tissue. This process blocks the abnormal electrical impulses that cause your heart to beat irregularly. It can treat the underlying cause of your irregular heartbeat, decrease your risk of stroke and enable you to return to normal activities.

Implantable cardioverter-defibrillator (ICD)
An implantable device that delivers an electrical shock to the heart (when necessary) to restore a normal heart rhythm. An ICD may help manage your arrhythmia. It is used primarily to treat ventricular tachycardia and ventricular fibrillation.
Lifestyle advice

Maintain a healthy weight

The Body Mass Index (BMI) uses your weight and height to calculate if your weight is healthy. A healthy BMI is between 18.5 and 24.9. If your BMI is over 25, ask your doctor for advice on how to lose weight.

Exercise regularly

Aim to perform moderate to intense exercise for at least 150 minutes a week, spread over several days for example walking, running or cycling.

Monitor alcohol intake

Men and women are advised not to drink more than 14 units a week on a regular basis. Fourteen units is equivalent to 6 pints of average-strength beer or 10 small glasses of low-strength wine.

Stop smoking

Ask your doctor about local smoking cessation services to help you quit. They will give you accurate information, advice and support during the first few months of stopping smoking.

Treatment of sleep apnoea

This is a relatively common condition that causes interrupted breathing during sleep, a noticeable sign of sleep apnoea is snoring. Talk to your doctor if you experience loud snoring, especially if it is punctuated by periods of silence.
Questions to ask your doctor

- What causes an irregular heartbeat?
- What are the risks of having an irregular heartbeat?
- Can I do anything to manage these risks?
- How often do I need to see a doctor?
- How will I know if my arrhythmia is getting worse?
- What are my treatment options?
- What medications may I have to take and why?
- How long will I need to take medication?
- Are there alternatives to medication?
As with any medical treatment, individual results may vary. Only a Cardiologist or Electrophysiologist can determine whether ablation is an appropriate course of treatment. There are potential risks including bleeding, swelling or bruising at the catheter insertion site, and infection. More serious complications are rare, which can include damage to the heart or blood vessels; blood clots (which may lead to stroke); heart attack, or death. These risks need to be discussed with your doctor and recovery takes time.

The information featured here is not intended as medical advice, or to be used for medical diagnosis or treatment. Please talk to your doctor if you have any questions.

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