

Abdominal

The portion of the body between the chest and pelvis area.

ACE inhibitors

Medication that reduces the heart's workload by making the blood vessels expand, which lowers blood pressure.

Angiotensin II receptor blockers

Similar to ACE inhibitors, this medication is used to keep blood pressure from rising. They lower blood pressure without lowering the heart rate.

Antiarrhythmic Drugs

Medications designed to prevent or treat cardiac arrhythmias.

Anti-Tachycardia Pacing (ATP)

Often the first type of therapy used by an ICD to treat a fast heart rhythm by delivering short bursts of pacing pulses.

Arrhythmia

An irregular or abnormal heart rhythm.

Atria

The two chambers in the upper part of the heart. Blood enters the atria and subsequently empties into the ventricles.

Atrial Fibrillation

Extremely rapid, irregular atrial impulses. This rapid rate does not allow the atria to pump blood effectively into the ventricles. It can also cause irregular rapid ventricular beats.

Atrioventricular node (AV)

The node in the lower part of right atrium that transmits the electrical signal from the SA node to the conduction pathways.

Automated external defibrillator (AED)

Portable devices used to electrically stimulate a fibrillating heart. Using an AED, strong electric shocks are passed between the paddles and electrodes placed on a person's chest.

Beta blockers

These medications help control heart rate and reduce the heart's tendency to beat faster. They are used to help the heart maintain a slower rate and lower blood pressure.

BPM

Beats per minute.

Bradycardia

An arrhythmia caused by the slow beating of the heart.

Calcium channel blockers

These medications are used to help lower blood pressure and improve blood circulation in the heart.

Cardiac catheterization

A heart procedure used to diagnose heart disease. A catheter (inserted into an artery in your arm or groin) is guided to the heart, contrast dye is injected and X-rays of the coronary arteries, heart chambers and valves are taken.

Cardiac resynchronization therapy (CRT)

Implantable device therapy for people with moderate to severe heart failure who also have ventricular dyssynchrony. Helps the lower chambers of the heart (left and right ventricles) beat together again.

Cardiomyopathy

A degenerative disease of the heart's muscle tissue.

Cardioversion

Conversion of an abnormal cardiac rhythm (VT or atrial tachyarrhythmia) to a normal one either by the use of medication or by the application of electric shock, as with an ICD.

Catheter

A tubular instrument used that is inserted into a body passage.

Conduction pathways

Conducts the electrical signal from the AV node to the ventricles.

Congestive heart failure

A term often used to describe heart failure.

Coronary artery disease

Chronic condition in which a clogged artery prevents the heart from receiving sufficient blood.

Defibrillation

An ICD therapy option used to treat ventricular fibrillation. Defibrillation consists of high energy shock impulses.

Defibrillator

See Implantable Cardioverter Defibrillator (ICD).

Device Interrogation

The use of telemetry to retrieve information from the ICD, its programmed parameters and data stored in its memory.

Dual-chambered pacing (DDD)

Provides pacing in both the upper and lower chambers of the heart.

Dyspnea

Shortness of breath, one of the symptoms of heart failure.

Dysynchrony

A condition in which the two lower chambers of the heart are not beating together as they do normally.

Echocardiogram (Echo)

A test that provides a measurement of how well the heart is pumping and is a key indicator of the heart's function.

Ejection fraction (EF)

A measurement of how much blood the pumping chambers of the heart (left and right ventricles) are able to pump out or eject and supply to the organs and muscles of the body.

Electrocardiogram (ECG/EKG)

A diagnostic test that measures and records the heart rhythm. This test tracks the heart's electrical system.

Electrocautery

Medical instrument which delivers electrical currents through a probe and is used to stop bleeding during surgery.

Electromagnetic interference (EMI)

Magnetic or electrical interference from machines or devices which can interrupt the normal operation of a pulse generator.

Electrophysiologist

A cardiologist with a subspecialty in dealing with the diagnosis and treatment of heart rhythm problems.

Electrophysiology (EP) study

A test to assess the electrical functioning of the heart and to evaluate the potential for rhythm disturbances.

Heart attack

See Myocardial infarction

Heart failure

Heart failure occurs when the heart muscle does not pump as much blood as the body needs. "Failure" doesn't mean that the heart has stopped pumping, just that it is failing to pump as effectively as it should. Heart failure is most often caused by a problem with the left ventricle of the heart.

Hypertension (High blood pressure)

A condition where the heart is working harder than normal to force blood into the arteries through the circulatory system. Over time, high blood pressure can cause damage to the heart and other organs.

Implantable Cardioverter Defibrillator (ICD)

An ICD is a device placed inside the body that monitors and treats abnormal heart rhythms. It can deliver several types of therapies, including cardioversion, anti-tachycardia pacing and defibrillation. The device is usually implanted under the skin in the upper chest area. It is often referred to as a defibrillator.

Lead(s)

The wire(s) that connect the pulse generator to the heart.

Magnetic resonance imaging (MRI)

A medical diagnostic test used to produce images of the interior of the body. MRI uses strong magnetic fields and low-energy radio waves to create images. The strong magnets can interfere with the functioning of a pacemaker or ICD. People with one of these devices must not participate in MRI tests without informing their physician about your implanted device.

Myocardial infarction (MI)

Also known as a heart attack. Occurs when the heart muscle is damaged because blood is blocked from reaching it. The heart muscle (myocardium) is damaged or is non-functional (infarct).

Pacing

Electrical signals used to speed up a slow heart rhythm.

Programmer

The device that is used to communicate with the pulse generator.

Pulse generator

Component of the ICD that contains the battery and electronic hardware.

Radiotherapy

Therapy that uses x-rays and radioactive substances to treat cancer and other types of diseases.

Sinoatrial node (SA)

A small collection of cells in the right atrium that generates the electrical signal that causes the ventricles to contract.

Sudden cardiac arrest (SCA)

Sudden cardiac arrest occurs when the heart's lower chambers (ventricles) suddenly develop a rapid, irregular rhythm (ventricular fibrillation) and the quivering ventricles cannot pump blood to the body.

Sudden cardiac death (SCD)

Natural death due to cardiac causes, noted by abrupt loss of consciousness and cardiac arrest within an hour of the onset of acute symptoms. Pre-existing heart disease may or may not have been known to be present.

Supraventricular tachycardia (SVT)

A fast arrhythmia that originates in the atrium.

Syncope

A temporary loss of consciousness due to lack of blood to the main portion of the brain (Cerebrum). Often referred to as fainting.

Telemetry

The wireless transmission and reception of data to and from an ICD.

Vasodilators

Medications that cause the blood vessels to widen or relax so blood can flow more easily. ACE inhibitors are one type of vasodilator.

Ventricles

The two chambers in the lower part of the heart. Blood from the right ventricle goes to the lungs to pick up oxygen. Blood from the left ventricle flows through the rest of the body.

Ventricular fibrillation (VF)

A rapid, disorganized arrhythmia characterized by the “quivering” of the heart.

Ventricular tachycardia (VT)

A rapid, regular arrhythmia caused by the production of abnormal electrical signals in the ventricles.