

VENTRICULAR TACHYCARDIA (VT)

Ventricular tachycardia (VT) is an arrhythmia characterized by a sudden onset of a fast heart rate that originates in the lower chambers of the heart (ventricles). Sustained VT is when the arrhythmia lasts for more than 30 seconds, otherwise the VT is called non-sustained (NSVT).

CAUSES:

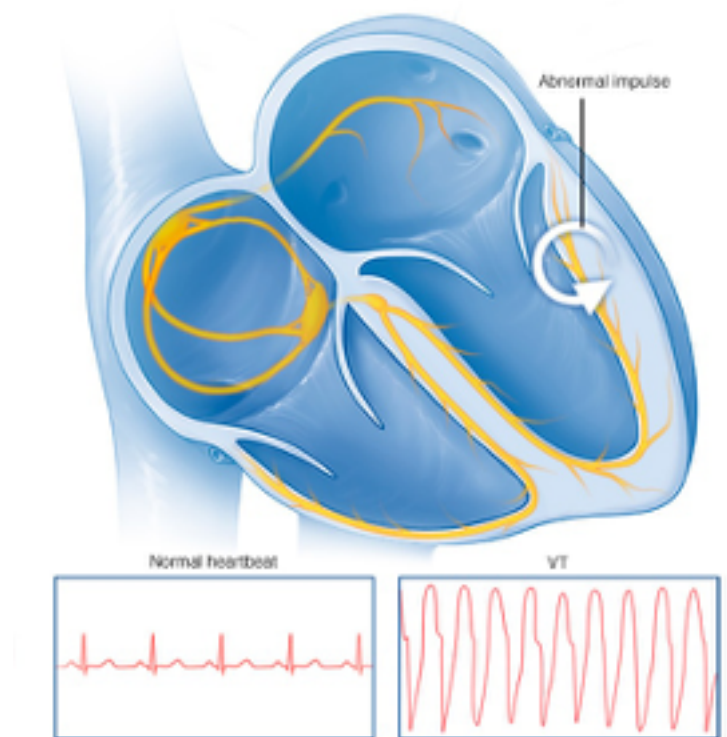
Structural Heart Disease:

Ventricular tachycardia most often occurs when the heart muscle has been damaged and scar tissue creates abnormal electrical pathways in the ventricles. This can occur in the following instances:

- Heart attack
- Cardiomyopathy/Heart failure
- Myocarditis
- Heart valve disease

Idiopathic Ventricular Tachycardia

In some situations people with no known heart disease may develop VT. This is due to an electrical impulse in the ventricle automatically triggering the VT on its own. This form of ventricular tachycardia is easier to address and is usually not life threatening.



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Genetic causes:

Catecholaminergic Polymorphic VT (CPVT):

This is a genetic condition that is usually characterized by syncope (passing out). Patients with this type of VT often will have family members who may recall a history of passing out.

Hypertrophic Cardiomyopathy: a disease in which the heart muscle becomes abnormally thick

Sarcoidosis: a rare disease in which clusters of white blood cells, form in the tissue of the heart. This can interfere with the heart's electrical system and cause irregular heartbeats.

Long QT syndrome or Brugada syndrome: genetic diseases that alter the heart rhythm itself

Symptoms:

When you have VT, your heart beats very fast. This may only last for a few seconds. Longer episodes may be dangerous. The heart beats so fast that it can't get enough blood to the rest of your body.

- Fast heartbeat or a fluttering feeling in the chest (palpitations)
- Dizziness or lightheadedness
- Chest pain
- Fainting (syncope)
- Shortness of breath
- Neck tightness
- Cardiac arrest
- Some patients have no symptoms at all

Treatment

Medications: Your doctor may prescribe antiarrhythmic medications to help prevent VT from occurring

VT Ablation: A procedure that uses heat energy to create small scars in the lower chamber of your heart to block the abnormal electrical signals that cause the ventricular tachycardia

Implantable Cardioverter Defibrillator (ICD): Is a small, battery powered device that is implanted under your skin, just under the collar bone with wires that are connected to your heart. The ICD monitors your heart rhythm and if a dangerous and abnormally fast rhythm is detected, the device can deliver a shock to convert your heart back to a normal rhythm. An ICD also functions as a pacemaker, but not all patients who have an ICD, need to use the pacing function.