

# SUDDEN ARRHYTHMIC DEATH SYNDROME (SADS)



## WHAT IS SADS?

Sudden Arrhythmic Death Syndrome (SADS) is part of sudden cardiac death. However, SADS is defined as a sudden death whereby subsequent post mortem analysis and a toxicology screen fails to identify any obvious cause.

Killed by a video game: Excitement triggered fatal heart attack of teenager who died while playing his Xbox'

**AFFECTS AGES 0-35 YEARS**

**APPROX. 500 DEATHS PER YEAR**

**NO WARNING SYMPTOMS!**

SADS killed my daughter and sister, but I won't let it take my son

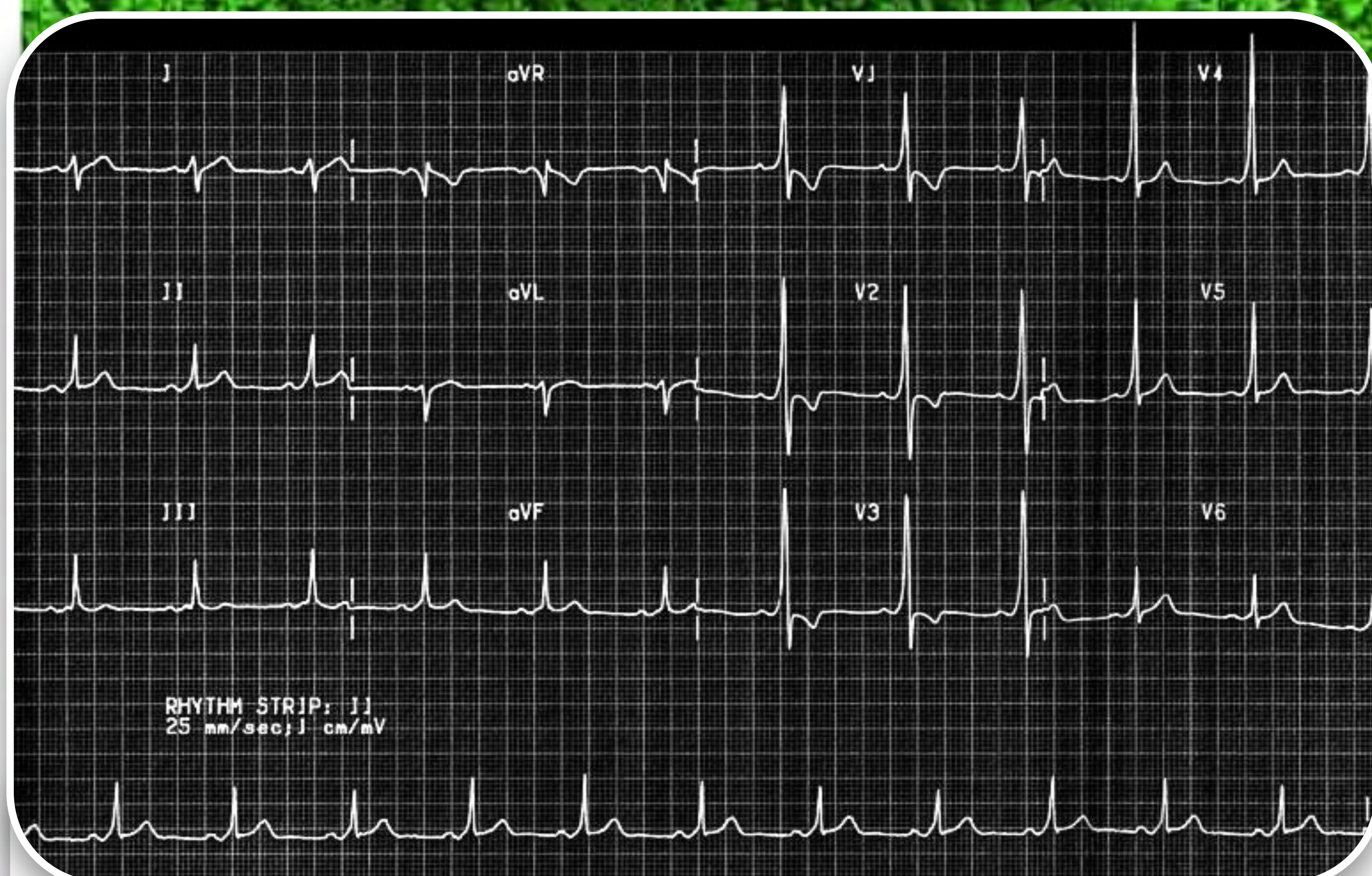
**RELATIONSHIP TO EXERCISE**

**BASELINE ECG WILL REVEAL ABNORMALITY IN 80-90% OF CASES**

**PREVIOUS HISTORY OF BLACKOUTS, SHORTNESS OF BREATH OR CHEST TIGHTNESS DURING EXERTION**

**IF SUSPICIOUS HISTORY +/- UNEXPLAINED YOUNG DEATH IN FAMILY → REFER!**

## CONDUCTION DISEASE



**Type A Wolff-Parkinson White (WPW):** Left-sided bypass tract with positive delta wave with Short PR and Wide QRS



**Type B Wolff-Parkinson White (WPW):** Right-sided bypass tract with negative delta wave with Short PR and Wide QRS

+ Reentrant Tachycardias

## STRUCTURAL HEART DISEASE



**Hypertrophic (Obstructive) Cardiomyopathy (HOCM)**

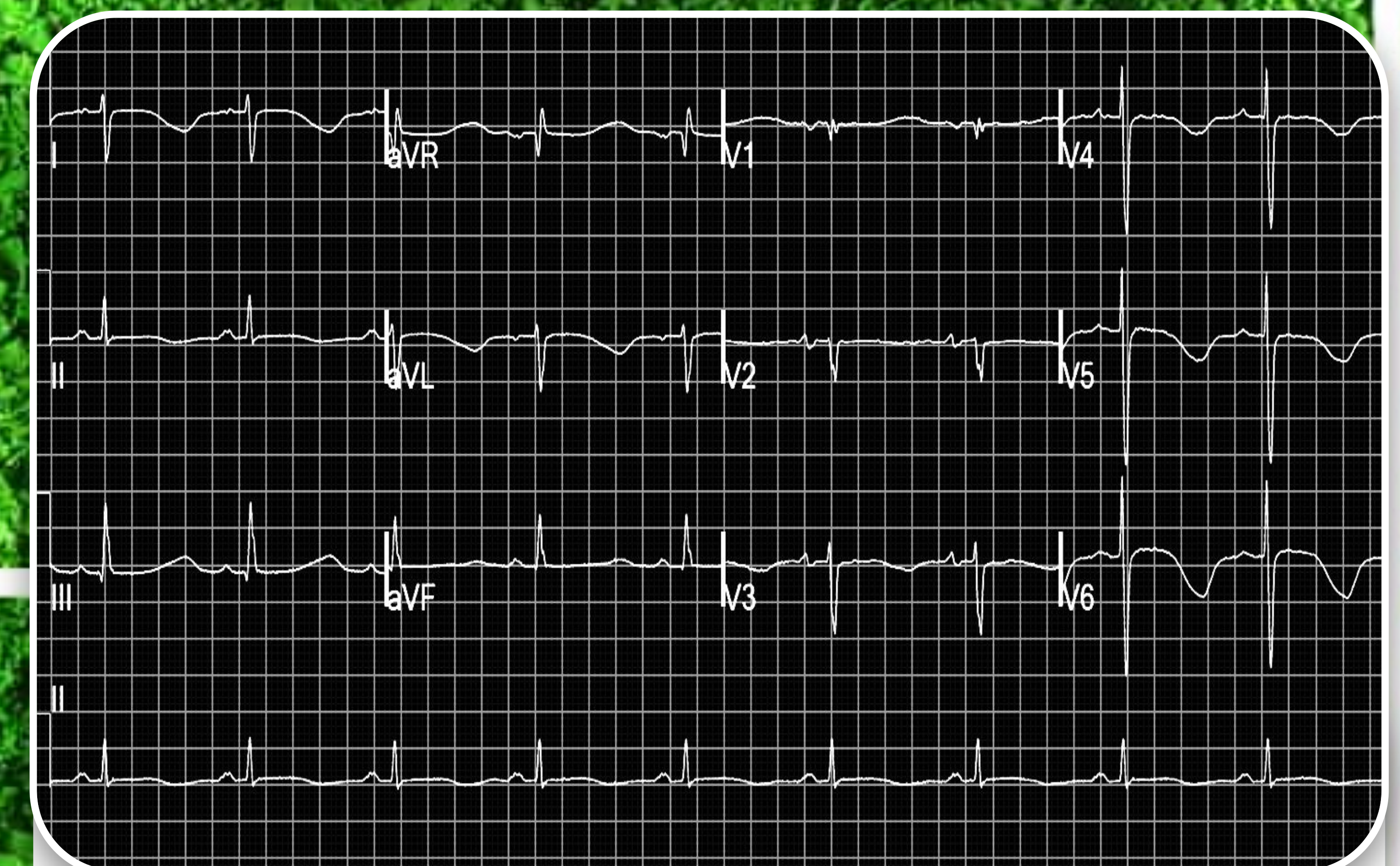


**Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC)**

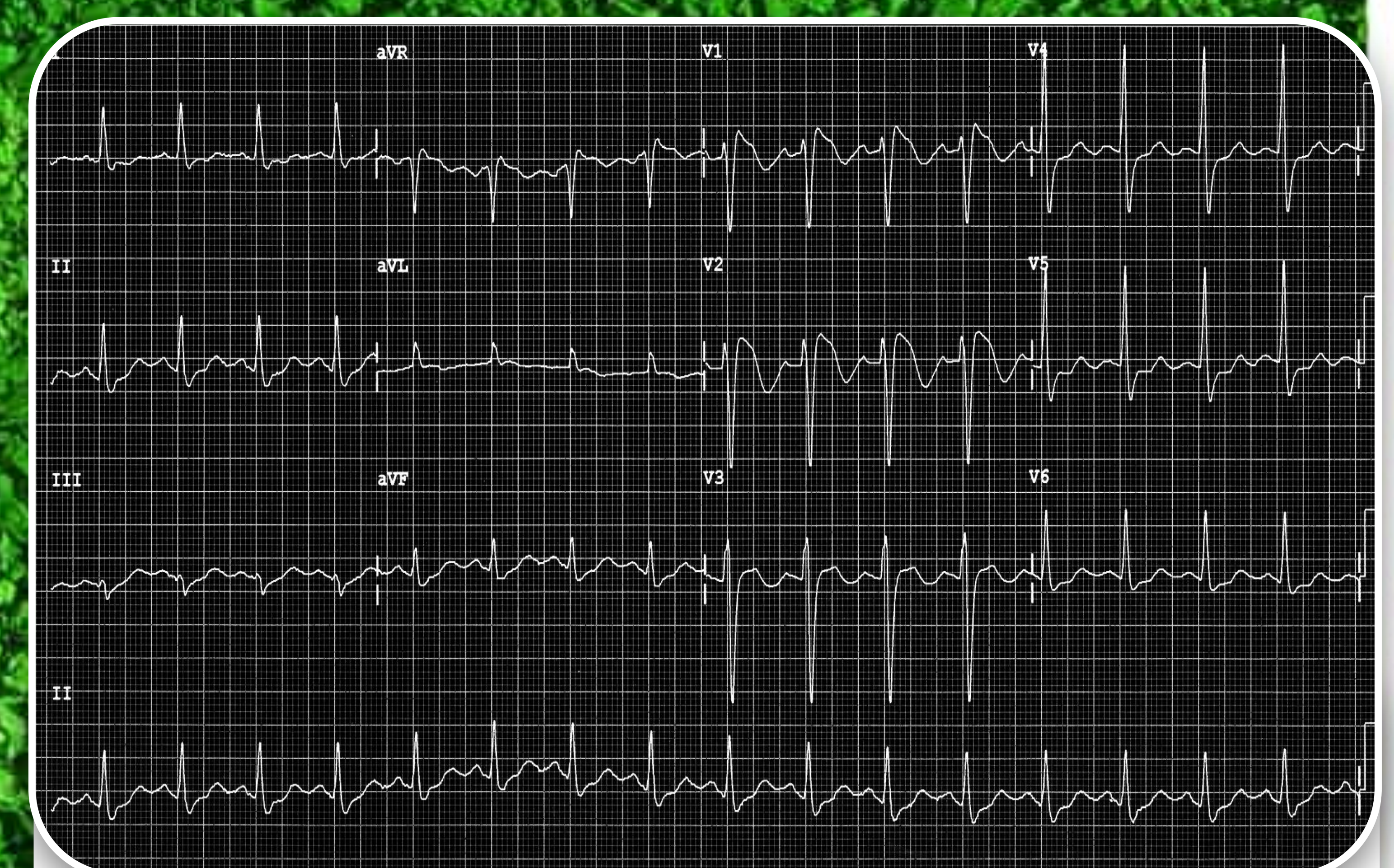
+ Dilated Cardiomyopathy

+ Restrictive Cardiomyopathy

## ION CHANNEL -OPATHIES



**Long/Short QT Syndrome (Natural or Iatrogenic)**



**Brugada Syndrome**



**Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)**