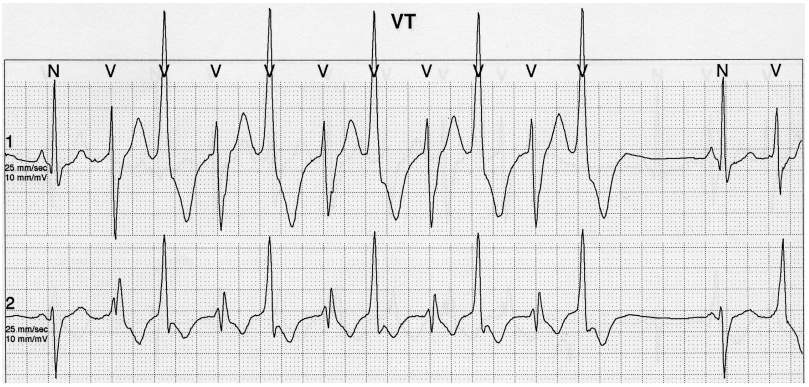
Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)

Introduction

CPVT is a condition that is characterized by exercise or emotion related fainting or cardiac arrest. Patients with CPVT usually have a normal resting ECG, but abnormalities present themselves with exercise or emotional stress. Swimming is uniquely associated with CPVT and type 1 Long QT Syndrome [1, 2].

Catecholaminergic polymorphic ventricular tachycardia is inherited, with other affected family members in 30% of cases, with genetic testing yielding a causative mutation in the majority[46].



Diagnosis

Abnormal heart rhythms are often detected in individuals who undergo exercise testing and Holter monitoring [3-6]. Infusions of adrenaline can also unmask key abnormal heart rhythms that help to diagnose CPVT (Figure) [3, 5, 7, 8].

Treatment

Patients are treated with beta-blockers, drugs that block the adrenaline effect on the heart. An ICD is considered depending on the severity of presentation and family history [4, 6, 9, 10].

Selected References

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