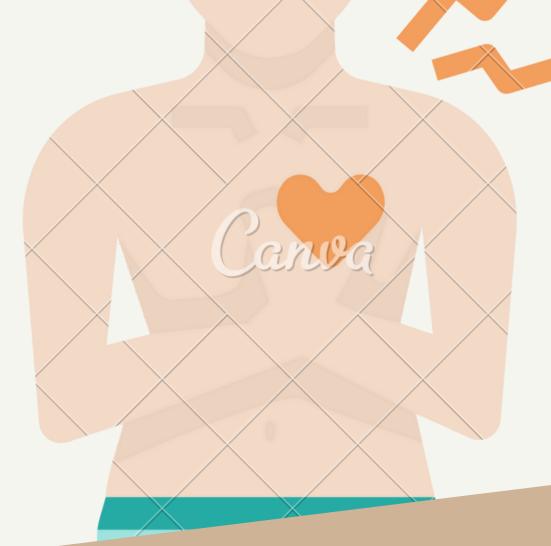
Supraventricular Tachycardia

Supraventricular Tachycardia (SVT) refers to any tachycardia caused by electrical impulses originating above the heart's ventricles.





Classification

Technically atrial fibrillation, atrial flutter and even physiological (e.g. exercise induced) tachycardia fall under SVT. In clinical practice, however, SVT usually refers to AV node re-entry tachycardia (AVNRT), whereby, a re-entry circuit forms within or near the AV node. Other examples of SVT include atrioventricular re-entry tachycardia (AVRT) where an accessory pathway forms, such as the Bundle of Kent, that is not part of or near the AV node, or junctional tachycardias.

ECG Features

Narrow-complex tachycardia unless bundle branch block is present in which case QRS complexes will be wide Often no visible P waves as they are hidden by QRS complexes

Triggers

caffeine
alcohol
exercise
drugs (e.g. cocaine, MDMA,
amphetamine)
acute illness (e.g. hyperthyroidism,
infection, PE, hypovolaemia)
metabolic derangement (e.g. high or
low K or Ca, hypoxia, high CO2,
acidosis)

Population

More common in younger females (generally <40 years old) with no underlying conditions.

Signs & Symptoms

sudden onset palpitations syncope chest pain pre-syncope dyspnoea tachycardia

Management use an ABCDE approach



!!Caution!!
Adenosine is
contraindicated in severe
asthma instead use
verapamil

Vagal Manoeuvres Valsalva manoeuvre, carotid massage

Supraventricular Tachycardia

Haemodynamically Stable?

Unsuccessful?

IV Adenosine

6mg rapid IV bolus; if unsuccessful give further 12mg; if unsuccessful give further 12mg

Unsuccessful

Seek Expert

Help

Long term

Management

• Catheter ablation

Synchronised Cardioversion

- Beta blockers
- Verapamil
- Diltiazem
- Flecainide
- Propafenone