

# Supraventricular Tachycardia (SVT)

## What is it?

The heart rate, normally varies between 60 and 100 beats per minute. When exercising or excited the rate can increase up to 170 beats per minute but quickly returns to normal resting. In Supraventricular Tachycardia (SVT) the heart races quite suddenly to rates as high as 200 beats per minute and usually wont slow down. The attacks may produce an uncomfortable feeling of palpitations, or chest pain, shortness of breath or dizziness. It is common during attacks to want to pass water.

## What Causes It:

Normally the heart follows a beat or rhythm which is generated in the collecting chambers of the heart (atria). This signal is then communicated to the pumping chambers (ventricles) by a single connection called the AV node which functions like electrical wiring. This ensures that the heart beat is orderly ie one contraction follows the other in the correct sequence. SVT is usually caused when there is an additional unnecessary electrical connection between the atria and ventricles, allowing a short circuit to occur. The short circuit leads to racing of the heart.

## What are the risks?

When the heart is racing it generally does no damage to the heart muscle unless it lasts for a very long time. If the heart rate is high it can cause the blood pressure to drop and make you dizzy or give chest discomfort.

## How do you treat it?

Simple measures can serve to stop the attacks. A "Valsalva manoeuvre" which is straining like you are passing a motion can work. You can perform this by taking in a deep breath, placing your hands on your stomach and pressing your stomach outwards into your hands without letting the air out of your lungs. This should be held for a few seconds. Sometimes the Doctor may press on the artery in your neck but this should only be done by your doctor.

Medications are also very effective either as prevention or during the attacks and including, Isoptin (verapamil, veracaps) and Flecainide (Tambocor). More recently a procedure performed under local anaesthetic has been developed to burn the unnecessary additional connection between the two heart chambers, called radiofrequency ablation. This procedure is curative and is available for selected types of SVT.

**SVT is common and generally responds well to treatment.**