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# Postural Tachycardia Syndrome (PoTS)

This information sheet is designed for patients who have been diagnosed with postural tachycardia syndrome (POTS).

It contains information on the diagnosis, treatment and management of PoTS.

# What is POTS?

Postural tachycardia syndrome (POTS) is an abnormality of functioning of the autonomic (involuntary) nervous system. It is defined as an increase in heart rate of over 30 beats per minute (40 bpm in those aged 12-19) when standing upright. Typically, there is no postural fall in blood pressure, although fainting (syncope) can occur (see below).

The symptoms can vary but mostly involve orthostatic intolerance (symptoms that develop on standing up and are relieved by lying down) and are often made worse by various daily activities, e.g., modest physical exertion or food. It is a disorder which is slowly being recognized by the medical profession.

POTS is often under appreciated by physicians, which can impact on the patient's quality of life through misdiagnosis or being informed symptoms are "all in their head". Historically, many patients with POTS were given a diagnosis of chronic fatigue syndrome/ ME/CFS, anxiety, or panic disorder.

However, one key factor in POTS is that symptoms generally occur when standing upright rather than in a situation that causes distress or worry, as in panic disorder.

The diagnosis is based on typical symptom pattern and an active stand test, when heart rate and blood pressure are recorded lying down and then over several minutes, when standing. A tilt test may also be recommended to exclude other conditions with similar symptoms.

### **Symptoms**

#### The main symptoms of POTS include:

- Syncope (fainting)
- Dizziness or light-headedness
- Fatigue
- Insomnia
- Palpitations (a sensation of the heart pounding)
- Blurred vision
- Weakness
- Venous pooling or discoloration of the ankles or feet
- Chest pain

#### Potentially related symptoms:

- Loss of concentration
- Migrainous headache
- Fatique
- Shortness of breath
- Coldness of legs and fingers
- Body temperature regulation issues
- Hyperventilation (very fast breathing) that can further affect the control of blood pressure and increase the risk of fainting and feelings of anxiety

## What causes POTS?

In many cases, the underlying cause is unknown. Sometimes teenagers with POTS find that their symptoms disappear with age. It is more common in females and can develop during or after pregnancy. Hypermobility spectrum disorder often co-exists with POTS. It can also occur in autoimmune disorders, following a significant event (surgery, accident, serious illness) or in association with a viral illness or growth spurt.

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