Postural Tachycardia Syndrome (POTS)

What is POTS?

Postural Tachycardia Syndrome (POTS) is a manifestation of autonomic dysfunction and is defined as an increase in heart rate of over 30 beats per minute when standing upright but without a postural fall in blood pressure; this often is made worse by even modest physical exertion. It is a relatively new disorder, which is slowly being recognized by the medical profession. It is often underappreciated 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, anxiety or panic disorder.

Diagnosis is ideally made in an autonomic center, where tilt table (see STARS Tilt Table Information sheet) with relevant autonomic testing (often with exercise testing and sometimes food which can worsen symptoms) confirms the disorder and importantly excludes other causes.

Symptoms

The main symptoms of POTS include:

- Increased heart rate (tachycardia)
- Chronic dizziness
- Light headedness
- Insomnia
- Palpitations
- Blurred vision
- Weakness
- Pooling or discoloration of the ankles or feet
- Chest pain

Potentially related symptoms:

- Loss of concentration
- Migrainous headache
- Fatigue
- Shortness of breath
- Coldness of legs and fingers
- Body temperature regulation issues
- Hyperventilation or very fast breathing that can result in loss of blood pressure and fainting

What causes POTS?

There are a number of factors and disorders causing or associated with POTS, which is why it is so important to be evaluated by a center with such experience. Ehlers Danlos iii Syndrome (a hypermobility joint syndrome) is sometimes associated with POTS. Depending on the results following investigation, treatment strategies can include self-help measures as well a range of drugs.

What help is there?

Self help:

- Elastic support stockings
- Hydration (2 liters orally per day). The patient should have at least one glass or cup of fluids at meal time and at least two at other times each day to obtain 2 – 2.5 liters per day
- Increasing salt intake (10-20g of salt)

Medication:

Some specialists do prescribe medication and Midodrine is well known as a drug that can help sufferers lead a more normal life.
Therapy:

Cognitive-behavioral therapy (CBT) has had some success in helping a patient come to terms with POTS and help manage their lives.

Immediate action in the event of a syncopal attack:

1. If symptoms are mild or you are unable to sit or lie down, cross your ankles and tense your calf muscles tightly. Combine this movement with buttock clenching to make effects more pronounced (this will help to get the blood pumping around your body and increase your blood pressure so relieving symptoms).

2. If you are able, sit down IMMEDIATELY or, if possible LIE DOWN FLAT AND PUT YOUR LEGS IN THE AIR - for example against a wall or propped up on pillows, and if you can it is preferable to do a cycling movement with your legs.

3. SQUAT if you are unable to lie down.

4. Don’t try to fight your symptoms; you are not stronger than your blood pressure, and it will win!

5. GET UP CAUTIOUSLY when you feel well again. Slowly sit up and gradually stand up. If symptoms continue, promptly repeat immediate action steps.

Researchers are attempting to identify and treat the causes of POTS. Studies are showing that patients will eventually suffer fewer and fewer symptoms with decreasing frequency.