

Postural Orthostatic Tachycardia Syndrome (POTS)

What is POTS?

Postural Orthostatic Tachycardia Syndrome (POTS) is a condition in which the body's adaptation to changes in position is impaired and less blood returns to the heart after a person stands up from a lying-down position. This causes a drop in blood pressure and an excessive increase in the heart rate (tachycardia). POTS symptoms can fluctuate for years. In a majority of cases, symptoms of POTS improve with time but can linger in certain patients.

What causes it?

The exact cause of POTS is unknown. POTS likely has multiple causes that vary from person to person. All these causes lead to an inability of the body's nervous system to rapidly regulate the flow and volume of blood after sudden changes in positions. Anyone at any age can develop POTS, but the majority of people affected are women between the ages of 15 to 50 years of age. Some women report an increase in episodes of POTS right before their menstrual periods. POTS often begins after a pregnancy, major surgery, trauma, or a viral illness such as COVID-19. Symptoms tend to be worse in the first several weeks after recovering from COVID-19.

What are the symptoms?

The primary symptom of POTS is feeling lightheaded or fainting after a change in position, typically standing up. In POTS, the lightheadedness or fainting is also accompanied by a rapid increase in heartbeat of more than 30 beats per minute, or a heart rate over 120 beats per minute, within 10 minutes of rising. The faintness or lightheadedness of POTS are relieved by lying down again. It may make individuals unable to exercise because the activity brings on fainting spells or dizziness.

How is POTS diagnosed?

To help diagnose this condition, your health care provider may do some of the following things:

- Take a detailed history of your symptoms to better understand when and how it started. They may ask you about your COVID-19 illness.
- Measure the changes in your heart rate and blood pressure when you change your position from lying down to sitting to standing over the course of several minutes.
- Order a tilt-table test that measures your heart rate and blood pressure while you lie on a bed that is tilted to different angles. This test may help but is not necessary to diagnose the condition.
- Check for exercise intolerance by checking your heart rate and blood pressure before, during, and after physical activity.
- Review your blood work for specific chemical abnormalities and make sure you do not have another explanation for your symptoms like anemia or autoimmune illness

How is POTS treated?

Therapies for POTS are targeted at relieving low blood volume or regulating blood flow (circulatory) problems that could be causing the disorder. There is no single treatment that is effective for all, and many people need a mix of different treatments. Here are a few action steps you can do on your own:

- Identify and avoid triggers, such as sudden changes in position
- Wear compression stockings. Those with abdominal binders being the most effective.
- Add extra salt to the diet and make sure you get adequate fluid intake. Dehydration can make the symptoms of POTS worse.
- Drink 16 ounces of water (2 full glasses) before sitting up or standing. It can also help raise blood pressure.

Talk to your health care provider about:

- Medications that help to increase blood volume and narrow blood vessels, or slow the heart rate.
- Special exercise programs that gradually improve orthostatic tolerance. Your health care provider may give you a program of specific exercises after you have completed your recovery from COVID-19. At first, do the exercises only when reclined. After a few weeks, you can start adding upright exercise.

Taking care of yourself is also important. You will have good days and bad days. Pay attention to what triggers you may have and practice good self-care.

When should I seek medical care?

Call 911 anytime you think you need emergency care. For example, call if you faint or lose consciousness and it feels different than the normal symptoms that you have.

Call your doctor now or seek urgent medical care if:

- You are more dizzy or lightheaded than normal.
- Your symptoms are worse than normal.

Monitor your symptoms and health closely. Call your provider if you are not improving like you normally do.

- Following up with your doctor is a very important part of your health and safety. Do not miss any appointments and call if you are having trouble.
- It is important that you know your medications and test results, and can share them with your provider so they can better care for you.

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Adapted from: NINDS. Postural Tachycardia Syndrome Information Page. Access at: <http://ninds.nih.gov>

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