

Visited 02/13/2015



National Institute of Neurological Disorders and Stroke

Disorders A - Z: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

NINDS Postural Tachycardia Syndrome Information Page

Synonym(s): Chronic Orthostatic Intolerance, Postural Orthostatic Tachycardia Syndrome

Table of Contents (click to jump to sections)

[What is Postural Tachycardia Syndrome?](#)

[Is there any treatment?](#)

[What is the prognosis?](#)

[What research is being done?](#)

[Clinical Trials](#)

[Organizations](#)



What is Postural Tachycardia Syndrome?

Postural orthostatic tachycardia syndrome (POTS) is one of a group of disorders that have orthostatic intolerance (OI) as their primary symptom. OI describes a condition in which an excessively reduced volume of blood returns to the heart after an individual stands up from a lying down position. The primary symptom of OI is lightheadedness or fainting. 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 that exceeds 120 beats per minute, within 10 minutes of rising. The faintness or lightheadedness of POTS are relieved by lying down again. Anyone at any age can develop POTS, but the majority of individuals affected (between 75 and 80 percent) 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. It may make individuals unable to exercise because the activity brings on fainting spells or dizziness.

Doctors aren't sure yet what causes the reduced return of blood to the heart that occurs in OI, or why the heart begins to beat so rapidly in POTS. Current thinking is that there are a number of mechanisms. Some patients have peripheral denervation (neuropathic POTS); some have symptoms that are due to sustained or paroxysmal overactivity of the sympathetic nervous system (hyperadrenergic POTS); and some individuals have POTS dominated by features of deconditioning.

Is there any treatment?

Therapies for POTS are targeted at relieving low blood volume or regulating circulatory problems that could be causing the disorder. No single treatment has been found to be effective for all. A number of drugs seem to be effective in the short term. Whether they help in long term is uncertain. Simple interventions such as adding extra salt to the diet and attention to adequate fluid intake are often effective. The drugs fludrocortisone (for those on a high salt diet) and midodrine in low doses are often used to increase blood volume and narrow blood vessels. Drinking 16 ounces of water (2 glassfuls) before getting up can also help raise blood pressure. Some individuals are helped by beta receptor blocking agents. There is some evidence that an exercise program can gradually improve orthostatic tolerance.

Visited 02/13/2015

What is the prognosis?

POTS may follow a relapsing-remitting course, in which symptoms come and go, for years. In most cases (approximately 80 percent), an individual with POTS improves and becomes functional, although some residual symptoms are common.

What research is being done?

The National Institute of Neurological Disorders and Stroke (NINDS) and other Institutes of the National Institutes of Health (NIH) conduct research related to POTS in their laboratories at the NIH and support additional research through grants to major research institutions across the country. Much of this research focuses on finding better ways to prevent, treat, and ultimately cure disorders such as POTS.

NIH Patient Recruitment for Postural Tachycardia Syndrome Clinical Trials


- ▶ [At NIH Clinical Center](#)
- ▶ [Throughout the U.S. and Worldwide](#)
- ▶ [NINDS Clinical Trials](#)

Organizations

[National Dysautonomia Research Foundation](#)

P.O. Box 301
Red Wing, MN 55066-0301
ndrf@ndrf.org
<http://www.ndrf.org> 
Tel: 651-327-0367
Fax: 651-267-0524

[Dysautonomia Youth Network of America, Inc.](#)

1301 Greengate Court
Waldorf, MD 20601
info@dynainc.org
<http://www.dynainc.org> 
Tel: 301-705-6995
Fax: 301-638-DYNA

Prepared by:
Office of Communications and Public Liaison
National Institute of Neurological Disorders and Stroke
National Institutes of Health
Bethesda, MD 20892

NINDS health-related material is provided for information purposes only and does not necessarily represent endorsement by or an official position of the National Institute of Neurological Disorders and Stroke or any other Federal agency. Advice on the treatment or care of an individual patient should be obtained through consultation with a physician who has examined that patient or is familiar with that patient's medical history.

All NINDS-prepared information is in the public domain and may be freely copied. Credit to the NINDS or the NIH is appreciated.

Last updated October 4, 2011

Visited 02/13/2015



[Home](#) | [About NINDS](#) | [Disorders A - Z](#) | [Research Funding](#) | [News From NINDS](#) | [Find People](#) | [Training](#) | [Research](#) | [Enhancing Diversity](#)
[Careers@NINDS](#) | [FOIA](#) | [Accessibility Policy](#) | [Contact Us](#) | [Privacy Statement](#)



NIH...Turning Discovery Into Health®