

Postural Orthostatic Tachycardia Syndrome (POTS)

Addressing Dizziness and Associated Problems in Children and Adolescents

Postural orthostatic tachycardia syndrome (POTS) in children and adolescents can be difficult to diagnose because of the variety of presenting symptoms. Often, parents turn to their primary care provider, who may refer to a specialist with expertise in the area of the patient's chief complaint, including cardiologists, neurologists, rheumatologists, and even behavioral health professionals. Recognizing the commonality of symptoms in these patients, and then performing advanced diagnostics is essential for confirming the diagnosis and establishing appropriate interventions.

POTS is related to dysfunction of the autonomic nervous system which causes orthostatic intolerance (i.e., symptoms such as lightheadedness with standing). Patients experience an abnormal increase in heart rate (tachycardia) with position changes, which produces a dizzy spell that sometimes leads to fainting (syncope). Patients with POTS may complain about headaches, fatigue, difficulty concentrating, anxiety, nausea and insomnia. Symptoms can be debilitating for many and challenging to treat. Teens may miss out on sports and social activities.

Advanced Focus on Children and Adolescents

Much of the current medical knowledge of POTS relates to studies performed in adult populations, or focuses on adults and children collectively. In recent years, however, research and clinical activities have begun to identify the unique characteristics of POTS in children and adolescents. The Neurosciences Center at Nationwide Children's is at the forefront of this new approach.

The POTS Clinic provides pediatric expertise and advanced diagnostics to diagnose and treat patients with suspected POTS. It is also the center for multiple ongoing clinical trials related to POTS in pediatric patients. Geoffrey Heyer, MD, director of the POTS Clinic, is among only a handful of pediatric neurologists in the U.S. with advanced specialization in POTS in pediatric patients. The key components of the POTS Clinic include:

- Thorough neurologic evaluation and health history
- Advanced diagnostic testing
- Head-upright tilt table testing
- Sweat testing
- A multi-modal treatment approach that focuses on the special needs of children and adolescents

[continued]

Advanced Diagnostics

Tilt-table testing, sometimes called “head-upright tilt test,” is a procedure that investigates the causes of syncope by producing a change in posture to intentionally produce the symptoms under medically monitored conditions. After lying flat on the table for 30 minutes, the patient is tilted at a 70-degree angle for up to 45 minutes while symptoms, heart rate and blood pressure are monitored.

The POTS Clinic at Nationwide Children’s is one of only a few neurology programs utilizing tilt-table testing with advanced pediatric expertise.

Appropriate Referrals

Primary care providers and subspecialists may refer patients with frequent episodes of lightheadedness and other symptoms potentially related to POTS.

When at all possible, children and adolescents should be referred to Nationwide Children’s to receive tilt-testing. While other providers offer the test, it is important for it to be conducted by those with advanced expertise in pediatric patients. Also, insurance providers typically will not approve repeat testing.

Referrals and Consultations

The Neurosciences Center at Nationwide Children’s accepts referrals from across the U.S. and internationally. Please indicate that this is a referral specific to the POTS Clinic and Geoffrey Heyer, MD, when making a referral.

Online: NationwideChildrens.org

Fax: (614) 722-4000

Phone: (614) 722-6200 or (877) 722-6220

Physician Direct Connect Line for 24-hour urgent physician consultations:

(614) 355-0221 or (877) 355-0221



Ranked among the best children’s hospitals in all 10 specialties