

Postural Orthostatic Tachycardia Syndrome: A Case Study and Discussion of Its Epidemiology, Pathophysiology, Diagnosis, and Management

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Abstract : Postural orthostatic tachycardia syndrome (POTS) is characterized by orthostatic intolerance due to an exaggerated tachycardia in response to standing upright. This exaggerated orthostatic tachycardia is defined as the heart rate (HR) rising 30 beats above a baseline value while supine or seated within ten minutes. The tachycardia can lead to symptoms of orthostatic intolerance such as palpitations, lightheadedness, exercise intolerance, fatigue, and anxiety. POTS can go undiagnosed for many years due to its similarities with other cardiac and psychiatric conditions and nonspecific presentation, making it crucial to raise awareness for it in the medical field. The following case study discusses a 30-year-old female who was evaluated in the emergency room several times before being referred to the clinic for POTS. An overview of what tests are performed with this patient is also provided, highlighting the diagnostic work-up for POTS and the process of ruling out other differentials being considered. Finally, the epidemiology, the various theories regarding its pathophysiology, the diagnostic process, and pharmacological and non-pharmacological management for POTS are reviewed.

Keywords : orthostatic intolerance, postural orthostatic tachycardia syndrome, syncope, tachycardia

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