Pregnancy Related Outcomes of Patients with Postural Tachycardia Syndrome (POTS)

Majd Alkhoury
University Hospitals Coventry and Warwickshire NHS Trust, Coventry, United Kingdom

Joshua Odendaal
University Hospitals Coventry and Warwickshire NHS Trust, Coventry, United Kingdom
Warwick Medical School, University of Warwick, Coventry, United Kingdom

Dawn Adamson
University Hospitals Coventry and Warwickshire NHS Trust, Coventry, United Kingdom

Siobhan Quenby
University Hospitals Coventry and Warwickshire NHS Trust, Coventry, United Kingdom
Warwick Medical School, University of Warwick, Coventry, United Kingdom

Abstract:

Postural Tachycardia Syndrome is a condition of the autonomic nervous system involving symptoms of orthostatic intolerance as well as non-orthostatic symptoms. There is limited evidence around the course and management of POTS in pregnancy. This study aims to identify the disease course of POTS in pregnancy and associated pregnancy-related outcomes.

All women with a known history of POTS between 2021-2023 at a single tertiary centre were included. A retrospective case note review was conducted utilising the electronic patient record. Outcomes, including POTS symptomatology, management, pregnancy complications and mode of delivery were recorded.

20 women were identified. 65% (n=13/20) experienced complications during their pregnancy, of which 60% (n=12/20) experienced a worsening of POTS symptoms and 20% (n=4/20) experienced intrauterine growth restriction. 85% (n=17/20) utilised non-pharmacological methods for POTS management, whereas only 40% (n=8/20) required pharmacological treatment with a beta-blocker. 50% (n=10/20) of patients underwent induction of labour (IOL) between 36-38 weeks, with 40% (n=8/20) undergoing an emergency caesarean section. Rates of IOL were higher than baseline national IOL rates.

The study demonstrates that POTS patients are at high risk of pregnancy related complications. A significant proportion demonstrate worsening of symptoms in pregnancy.

Keywords:

Pregnancy, dysautonomia, maternal outcomes, orthostatic intolerance, obstetric management, perinatal outcomes, autonomic dysfunction.