

OVERACTIVE BLADDER IN PATIENTS WITH POSTURAL TACHYCARDIA SYNDROMEHypothesis / aims of study

Postural Tachycardia Syndrome (POTS) is an autonomic disorder which predominantly affects females between 15 and 50 years old. POTS is a chronic disorder (>6 months) characterized by an excessive heart rate increment on standing (>30 beats/min) in the presence of characteristic symptoms of cerebral hypoperfusion or sympathetic activation on standing. Many patients describe lower urinary tract symptoms (LUTS), although LUTS has not been methodically assessed in POTS. We present a pilot study to quantitate LUTS, specifically overactive bladder (OAB) in patients with POTS.

Study design, materials and methods

Patients admitted for evaluation of POTS between June 2009 and October 2010 completed a validated, standardized questionnaire for OAB (OAB-q) at presentation. Symptom score and subscale analyses were conducted. Subscale health related quality of life (HRQL) scores were transformed into a 0-100 scale, with higher scores reflecting superior HRQL. Data are presented as mean±SD.

Results

Thirty-two females presented for evaluation of symptoms consistent with POTS. Twenty-nine women were subsequently diagnosed with POTS with 19 patients completing the OAB-q questionnaire (65.5% response rate). Average age was 33.5 ± 8.3 years. Symptom severity transformed score was 26.0 ± 16.4, and 13 of 19 patients (68.4%) would be diagnosed with probable overactive bladder. Nocturia was the most bothersome symptom, followed by frequency and urgency. Transformed scores for the coping, concern, sleep and social interaction domains were 86±21, 81±21, 72± 28 and 98±6, respectively.

Interpretation of results

No normative data was available for this study. Overall OAB-q scores indicate moderate symptom bother. Nocturia had the greatest negative impact on HRQL, while social interaction was the least affected HRQL domain.

Concluding message

To our knowledge, this is the first study to look at lower urinary tract function in patients with POTS. Further studies are needed to better understand LUTS in patients with dysautonomia. This understanding might provide critical mechanistic insight into the global pathophysiology of nocturia and OAB.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Institutional Review Board, Vanderbilt University Medical Center
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes