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☆ **Spotlight on Special Topics**

POSTURAL ORTHOSTATIC TACHYCARDIA SYNDROME IN SIX PATIENTS FOLLOWING COVID-19 INFECTION

Poster Contributions
Monday, May 17, 2021, 9:45 a.m.-10:30 a.m.

Session Title: Spotlight on Special Topics: COVID 7
Abstract Category: 61. Spotlight on Special Topics: Coronavirus Disease (COVID-19)

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Background: Postural orthostatic tachycardia syndrome (POTS) in patients with SARS Coronavirus-19 (COVID-19) infection is only noted in 2 case reports to date. We present a case series identifying and characterizing 6 patients with POTS as a long-term complication of COVID-19.

Methods: A nonblinded physician collected and analyzed data using Microsoft Excel.

Results: 5 patients were female, 1 male. Average age was 25 (+/- 5.5) years. POTS occurred 23 (+/- 17) days following COVID-19 infection, though this latency was variable. POTS onset followed resolution of COVID-19 symptoms in 4 of 6 patients. Most common symptoms included palpitations (6/6), lightheadedness (5/6), chest discomfort (5/6), and dyspnea (4/6). EKGs for all showed sinus rhythm, 2 with resting sinus tachycardia (113 and 116 bpm), 1 with sinus arrhythmia. 5 patients underwent echocardiogram, demonstrating normal systolic and diastolic left ventricular function. On orthostatic evaluation, supine heart rate (HR) was 83 (+/- 27) beats per minute (bpm) and standing HR was 129 (+/- 18) bpm for an average increase of 47 bpm. Patients were followed for 152 (+/- 90) days after COVID-19 infection and 129 (+/- 86) days after onset of dysautonomia. Only 1 patient had resolution of POTS symptoms, and only 2 reported any improvement since onset.

Conclusion: This case series highlights dysautonomia and POTS, sequelae of COVID-19 that negatively impact patients' quality of life and largely remain unrecognized, thus warranting additional investigation.

Figure 1A. Prevalence of POTS symptoms in six patients following COVID-19 infection. **1B.** Autonomic function testing: Positional change in heart rate from supine to standing

