

4.21 Dysautonomia and Postural Orthostatic Syndrome of Hypocapnia in Long Covid Syndrome

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Background: At least 10% of COVID-19 survivors will develop long covid syndrome (LCS).⁽¹⁾ Dysautonomia and orthostatic intolerance (OI) have been reported in both chronic fatigue syndrome and LCS. ⁽²⁾ Postural orthostatic syndrome of hypocapnia (POSH) has been demonstrated in patients with chronic fatigue syndrome and could be a contributing factor to LCS.⁽³⁾

Objectives: This study aims to evaluate the prevalence of OI and POSH in a cohort of patients with LCS.

Methods: 50 patients with a diagnosis of LCS aged >18 underwent a NASA lean test (NLT) in our clinic. The NLT consists of measurements of respiratory rate, heart rate, blood pressure, pulse oximetry, end tidal CO₂ and symptoms taken over 10 minutes in supine, followed by a leaning position.

Results: Orthostatic symptoms developed in 50% (n=25) during the test. Supine or orthostatic hypocapnia occurred in 58% (n=29) of patients. Postural orthostatic tachycardia occurred in 32% (n=16) and postural orthostatic hypotension occurred in 32%(n=16).

Conclusion: This study provides evidence of dysautonomia and hypocapnia in LCS. The NLT can be easily performed in clinic. Hypocapnia has been implicated in orthostatic cerebral vasoconstriction and this may be a treatable target for LCS. ⁽⁴⁾

Disclosures: None

References:

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