TABLE 10: Symptom-specific assessment and management considerations for autonomic dysfunction in patients with Long COVID

Assessment Element	Assessment Details
History 	• Current diet, fluid, and salt intake • Medication use that may impact symptoms, HR, or BP (e.g., antihypertensives, anticholinergics, stimulants) • Previous/current substance use • History of multifocal joint pain, subluxations, and/or dislocations (suggestive of joint hypermobility syndrome)
Physical exam	• Sensory exam (especially pinprick and temperature), to evaluate for small fiber neuropathy • Beighton Hypermobility Scale
Treatment Element	**Treatment Details**
Non-pharmacologic management	• Increase oral intake to 2.5-3.5L of fluid and 2.8-4g of sodium (i.e., 7-10g of salt) daily • Compression garments (waist-high stockings and/or abdominal binder) • Physical counterpressure maneuvers to mitigate orthostatic intolerance (e.g., stand with legs crossed, sit in knee-chest position) [91] • Personalized autonomic rehabilitation program o May start with supine core strengthening or recumbent activities (e.g., recumbent biking, swimming) o Dysautonomia International: Exercises for Dysautonomia Patients: https://dysautonomiainternational.org/page.php?ID=43
Pharmacologic management	• Consider weaning/de-prescribing medications or substances that can worsen orthostatic intolerance, tachycardia, and hypotension • See Table 5 for commonly used medications for Long COVID o See the autonomic dysfunction consensus guidance statement for additional medication options • Medication management should be strongly and promptly considered if symptoms are severe or persistent after a trial of non-pharmacologic measures • Consider IV fluids during symptom flare, sparingly and as needed
Referral, as needed	• To autonomic specialist, if: o Non-pharmacologic and first-line pharmacologic management does not ameliorate symptoms o Frequent syncope o Additional autonomic function assessment is warranted (e.g., Valsalva maneuver, deep breathing test, QSART, skin biopsy for evaluation of small fiber neuropathy) • Directories of autonomic specialists: o https://americanautonomicsociety.org/physician-directory/ o http://dysautonomiainternational.org/page.php?ID=14 • To general cardiologist, if autonomic specialist is unavailable and management is outside the scope of the treating clinician

Abbreviations: HR (heartrate), BP (blood pressure), IV (intravenous), QSART (quantitative sudomotor axon reflex test).