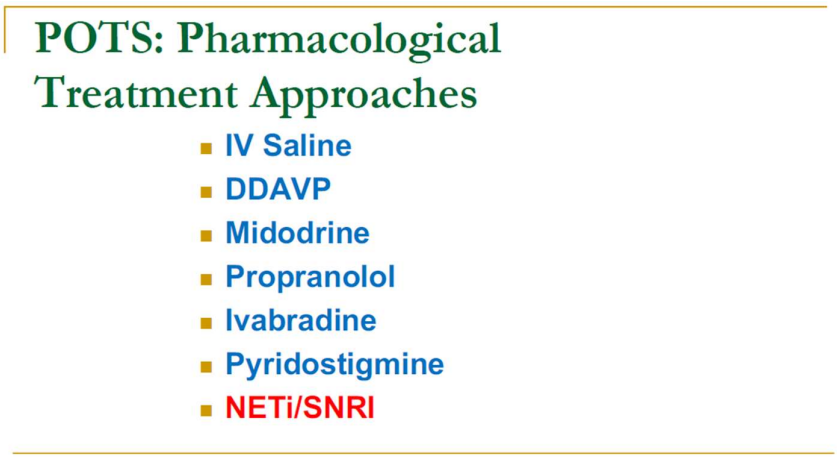
LONG COVID WEB ECHO
SESSION SUMMARY from 16 Jan 2026

(i) KEY PRESENTATION: Long COVID Postural Orthostatic Tachycardia Syndrome (POTS) – Treatments, by Dr. Satish R Raj MD MSCI FACC FHRS

Dr. Raj delivered a focused presentation on pharmacological management of Postural Orthostatic Tachycardia Syndrome (POTS) in long COVID patients.



He highlighted the following:

- Saline infusions as acutely effective for reducing orthostatic tachycardia by expanding blood volume with a 9-gram salt load, ideal for emergency settings at 1-2 liters, though not suitable for long-term use due to risks like infections and clots. Benefits last days to a week at most.

- Blood volume expansion strategies included Fludrocortisone to retain sodium and water, and DDAVP to limit free water loss, usable nightly or for events but requiring weekly sodium checks to avoid dilution dangers.

- Midodrine constricts vessels via alpha-1 receptors to raise blood pressure, despite side effects like piloerection and urinary retention.

- Beta blockers, particularly low-dose propranolol (10-20mg), effectively lower heart rate. It is relatively inexpensive and well-tolerated, while noting the higher doses worsen symptoms.

- Ivabradine blocks the heart's funny channel for heart rate reduction and quality-of-life gains, limited by ~$90/month cost without insurance.

- Pyridostigmine boosts acetylcholine as an adjunct, benefiting 60% of patients but causing diarrhea in 20%; it's useful for constipation.

- Dr. Raj warned against SNRIs or atomoxetine, which exacerbate symptoms in two-thirds of cases.

- Transcutaneous vagal nerve stimulation is a potentially promising new therapy option.

A member enquired about ports versus PICC lines for repeated saline infusions in trialing patients. Dr. Raj confirmed ports as the long-term endpoint after temporary PICCs (lasting months), but cautioned against them due to high infection risks, as catheters reach the heart, breaching skin barriers and creating bacterial entryways.

ECHO Co-Lead Dr. Iram Anees commented on the focus on management after prior diagnostics coverage and highlighted Dr. Raj's fibrinoid microclot research, connecting it to the RECLAIM trial where some patients responded to pentoxifylline.

Dr. Raj advocated combination therapies with non-pharmacological aids and coping strategies for chronic illness. He emphasized addressing fibrotic inflammation over anticoagulation for microclots, potentially via blood "cleaning" methods. This approach underscores the need for nuanced POTS care in long COVID.

(ii) CASE PRESENTATION:

A nurse practitioner with 15+ years of experience and 40+ years as a nurse shared living with long COVID since fall 2019 after contracting it in Europe pre-official diagnosis, while serving farmers and retired farmers (avg. age 77) in rural Shoal Lake, Manitoba—3 hours from Winnipeg, 1.5 hours from Brandon. Her symptoms (fatigue, brain fog, palpitations, dyspnea) resolved enough for full-time work with treatments; patients show orthostatic hypotension, brain fog, poor endurance, and muscle loss. Rural barriers include no local/Winnipeg specialists, costly transport ($250+ HandyVan), pharmacy delays (3-5 days for custom low-dose naltrexone), wary pharmacists, absent POTS testing, and provider shortages.

She inquired whether anyone else in Winnipeg or Manitoba treats long COVID, sought advice on aiding her patients, and asked how others could tackle these rural healthcare obstacles.

ECHO members discussed this case, and covered the following points:

Rural Long COVID Challenges

Responses emphasized access gaps as a pan-Canadian issue, accentuated in rural areas with no dedicated long COVID providers—even provincial capitals like St. John's, NL, rely on single individuals. Transportation barriers (e.g., costly HandyVan trips) and specialist shortages were echoed nationwide, alongside urban parallels like Montreal's closing clinics and retiring experts.

Virtual Care Solutions

Virtual care emerged as a key workaround, with successes in occupational therapy, phone-based follow-ups, and global reach (e.g., European clients). Workarounds for tech-averse elderly included waiting-room videos or print books/YouTube resources explaining interventions; allied professionals (OTs, physiotherapists) were hailed as vital for pacing education, with telehealth framed as equity for energy-limited conditions.

Diagnostic Tools

NASA Lean Test was widely endorsed for POTS diagnosis—validated, home-doable, performable by nurses/physios, avoiding scarce tilt tables (one per region in BC/Quebec). Holter + BP monitoring combos were suggested; Bateman Horne Center resources detailed it well. Clinical diagnosis suffices over formal tests, per experts.

Medication & Resource Access

Compounding delays (3-5 days for naltrexone – off-label use as it is not Health-Canada approved) plague rural and urban alike, with coverage confusion (e.g., Quebec patients overpaying); self-compounding guides and online resources are available.

Advocacy & Education

A member expressed urgency in promoting ECHO sessions and embedding long COVID in curricula, contacting bodies like the Royal College; workplace claims succeed by avoiding "long COVID" label, using POTS instead. Reframing as "post-concussive" or "post-viral reaction" aids buy-in, forums/communities foster peer support.

Community Support

Reassurance that no one treats long COVID alone—ECHO sessions exist for mutual aid, with links promised post-meeting. A member expressed allied providers' role in burnout-prone practices; creative labeling on referrals bypasses skeptical specialists, building "communities of care."

**********NEXT SESSION**********

Friday Feb 13, 2026
Topic:
Blood–Brain Barrier Disruption and Neuropsychiatric Symptoms in Long COVID
Speaker: Dr. Alba Azola

Submit your de-identified cases (PROJECT ECHO) to: Christine.chan@uhn.ca
Keep up-to-date with session topics: https://www.longcovidweb.ca/echo