

Nervous System & Pain Syndromes (PTSD / Chronic Pain / Central Sensitization)

Sterling et al. 2025: Stellate Ganglion Block for PTSD and Chronic Low Back Pain

- ***SGB as Unified Treatment***
Stellate Ganglion Block (SGB) produced simultaneous improvement in PTSD, chronic low back pain (cLBP), and myofascial pain symptoms in three female veterans unresponsive to prior medications and interventions (e.g., SSRIs, duloxetine, gabapentin, steroid injections, nerve ablation, psychotherapy).
- ***Targets Central Sensitization (CS)***
SGB mitigates sympathetic hyperactivity and norepinephrine release—key drivers in central sensitization syndromes (CSS) like PTSD, CRPS, cLBP, and myofascial pain.
- ***Rapid, Sustained Symptom Relief***
Two patients experienced sustained PTSD relief with one reporting complete resolution of arm and shoulder pain; one patient had complete pain relief and reduced PTSD triggers for 3+ months following each injection.
- ***Novel Application for cLBP***
This is the first case series showing SGB effectiveness for chronic low back pain—a nociplastic, sensitization-driven condition—highlighting its role beyond head/neck CRPS.
- ***Safe and Well-Tolerated***
All three patients tolerated the procedure well with no adverse events reported; fluoroscopic guidance was used for accurate, low-risk administration.

Study Details:

- ***Citation: Sterling, L., Fisher, K., & Woodbury, A. (2025). Stellate ganglion block for PTSD and chronic low back pain: A case report of three veterans. Journal of Clinical Medicine, 14(10), 3375. <https://doi.org/10.3390/jcm14103375>***
- ***Design: Case series of 3 female veterans with comorbid PTSD and chronic pain syndromes treated with image-guided SGB.***
- ***Outcomes: Immediate and lasting improvements in PTSD symptoms (measured via CAPS-5) and chronic pain (via NPRS), with functional recovery observed in daily activities and emotional regulation.***