Cervical Sympathetic Chain Blockade for PTSD

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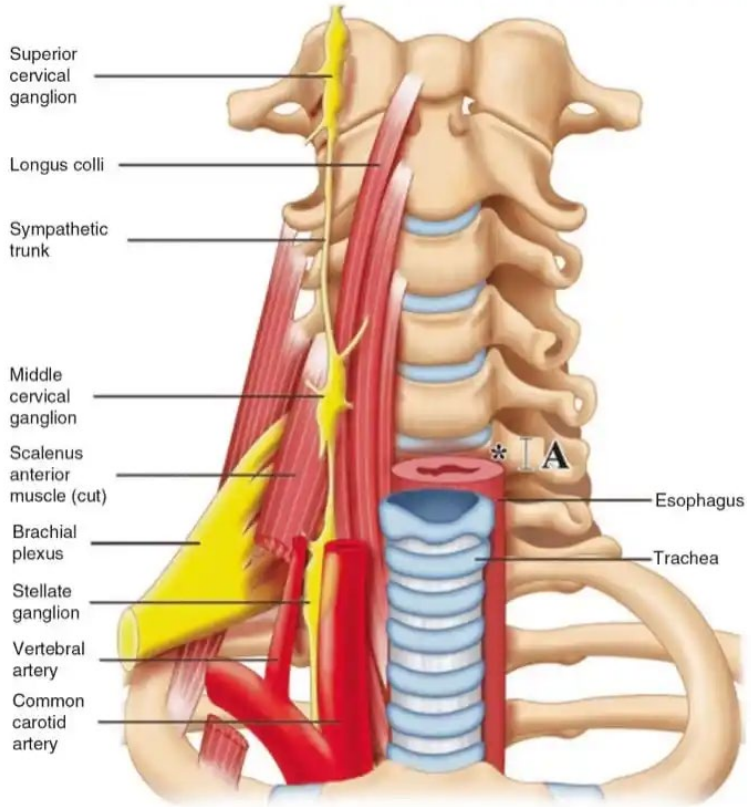
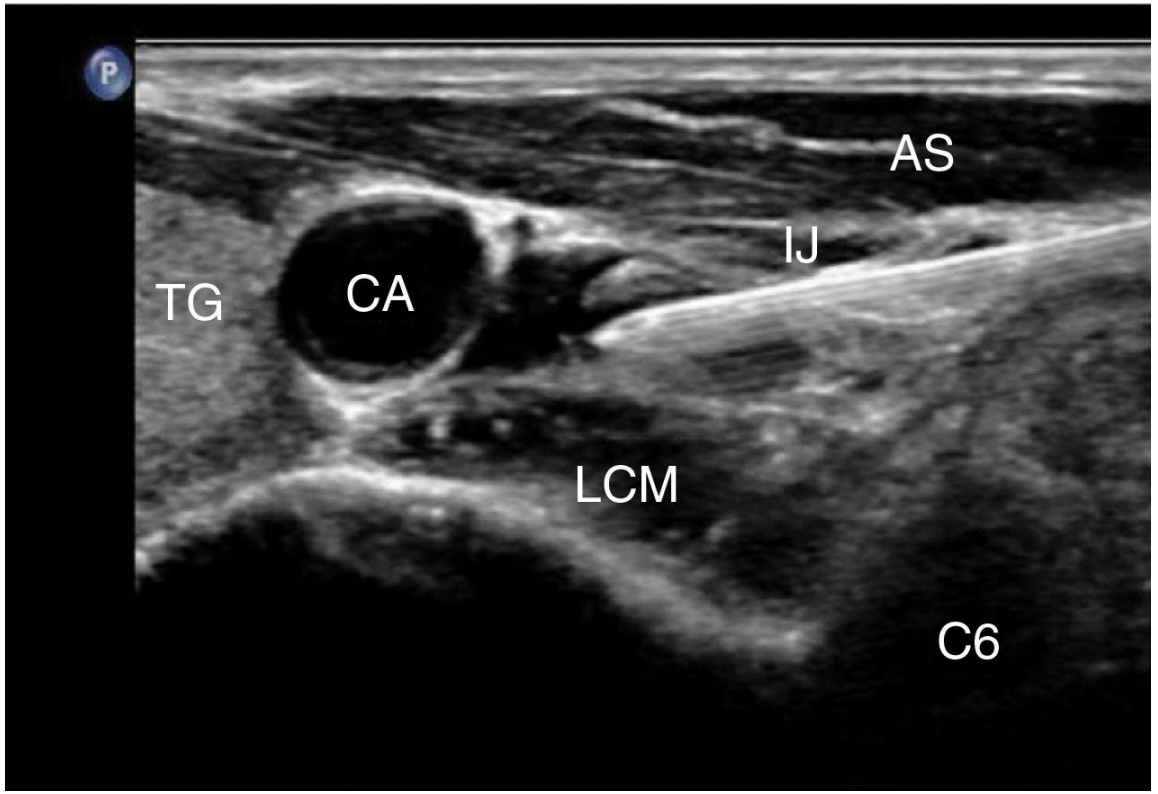
Cervical Sympathetic Blockade





Randomized Controlled Trial (RCT) of SGB for PTSD

- As reported in *JAMA Psychiatry*,[1] we conducted a multi-site, double-blind RCT of SGB for PTSD (*N*=113 active-duty Service Members)
  - PTSD interview (CAPS-5) administered at baseline and 8-week follow-up
  - SGB superior to sham injection, with medium effect size (12.2-pt vs. 5.8-pt reduction, *d* = 0.56, 95% CI [0.38, 0.73])
  - No serious adverse events; 3 study-related non-serious adverse events
  - Major Limitation
    - Population “too clean” with exclusion for MEB, moderate TBI, psychotic DO, suicidal ideation within 2 months, moderate to severe SUD

[1]Rae Olmsted et al., 2020

RCT Secondary Analysis

H1: SGB will show durable treatment effects between baseline and Week 2 & Weeks 2 and 4, but durability will decline between Weeks 4 and 8

H2: Symptoms from PTSD Cluster E (arousal/reactivity) will show greater improvement after SGB than Clusters B (re-experiencing), C (avoidance), and D (negative changes in cognition/mood).

H3: Post-SGB Horner's syndrome density will not moderate the effect of SGB treatment on PTSD symptom improvements

H4: PTSD symptom chronicity will not be related to SGB treatment effects

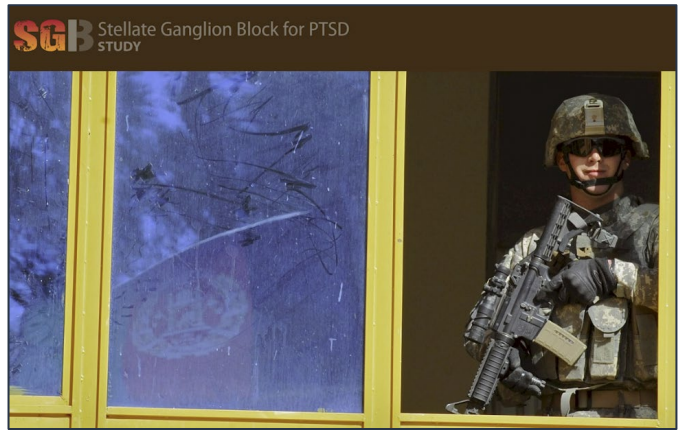
H5: Concurrent medication use will not be related to SGB treatment effects

H6: SGB will be an acceptable PTSD treatment to Service members, with few drawbacks

SGB Prospective Cohort Study

Participants and Procedure

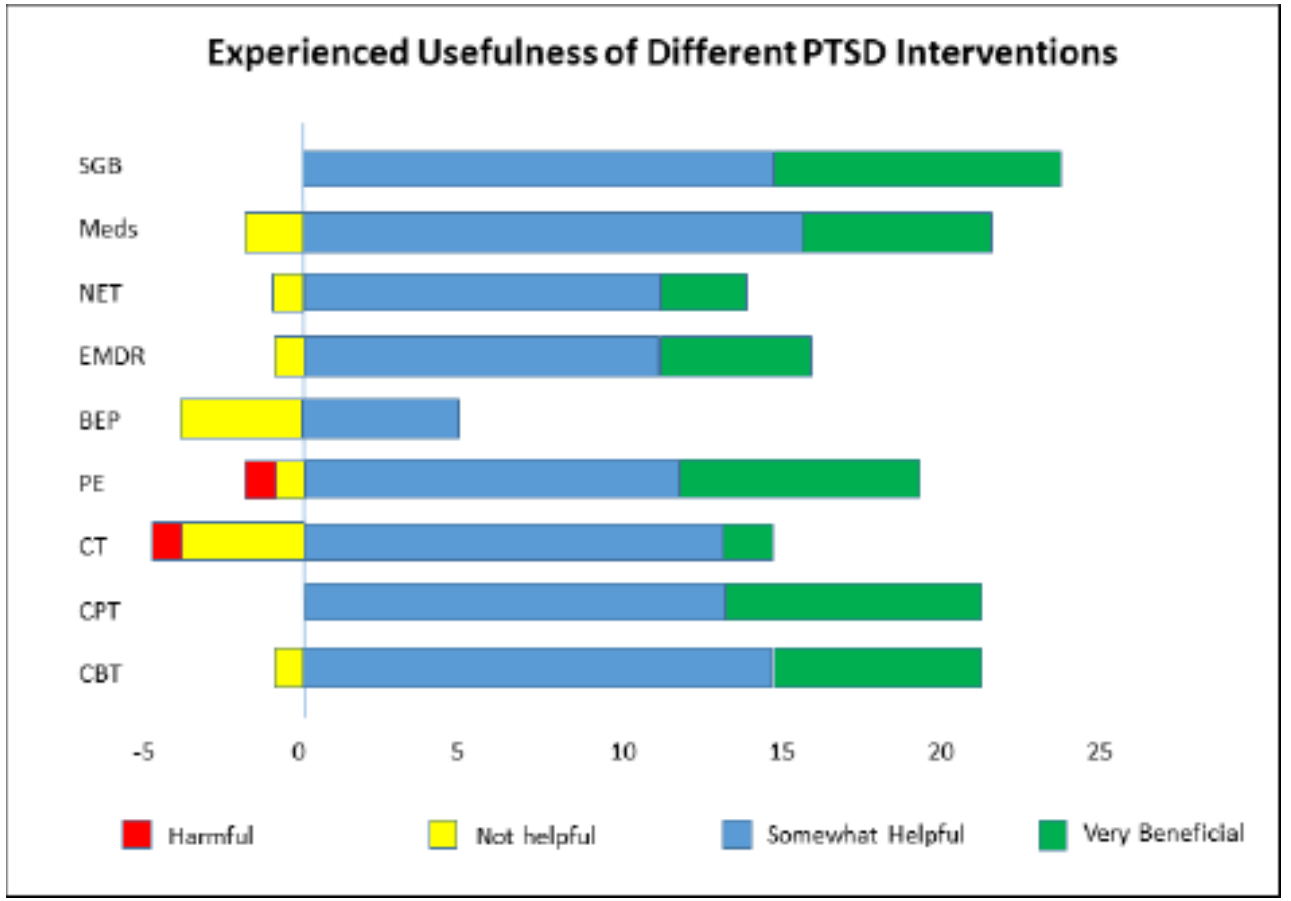
- ~300 active-duty Service Members, retirees, and Veterans scheduled for clinically indicated SGB to treat PTSD or other non-pain conditions
- Recruited from 4 MTFs
- Assessed immediately pre/post SGB and out to 12-month follow-up
  - Clinical interview, self-report surveys, and neurocognitive test



Outcomes

- PTSD symptoms (CAPS-5, PCL-5)
- Neurocognitive functioning (CPT 3)
- Sleep quality (PROMIS Sleep Disturbance, Garmin Fenix 6 indices)
- MH symptoms and tinnitus (PHQ-9, GAD-7, AUDIT, K6, SF12, THI)

Behavioral health clinicians endorse stellate ganglion block as a valuable intervention in the treatment of trauma- related disorders



QUESTIONS

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