



Frontline Workers Suffering with PTSD: A Study on the Benefits of Stellate Ganglion Blocks

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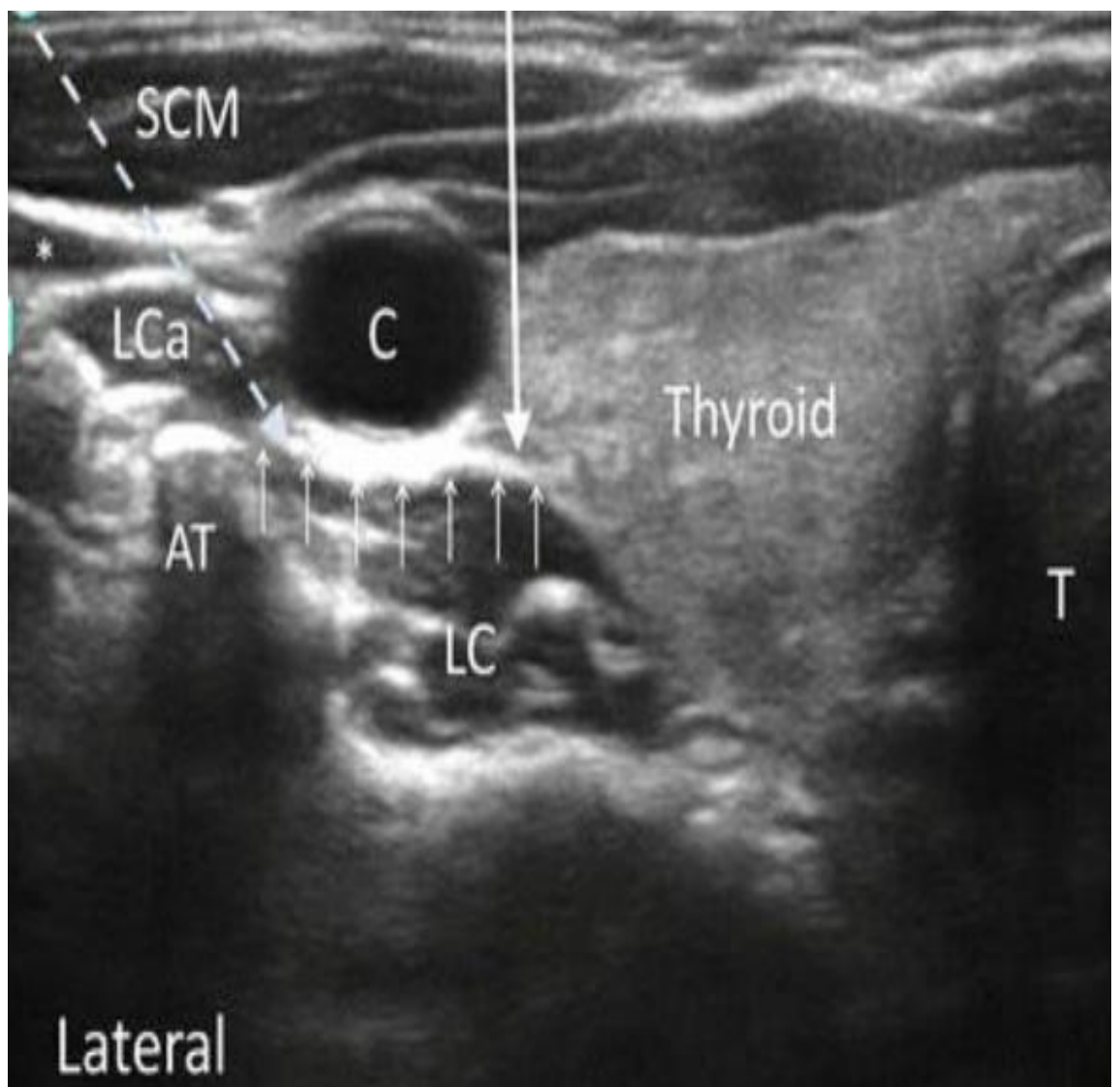
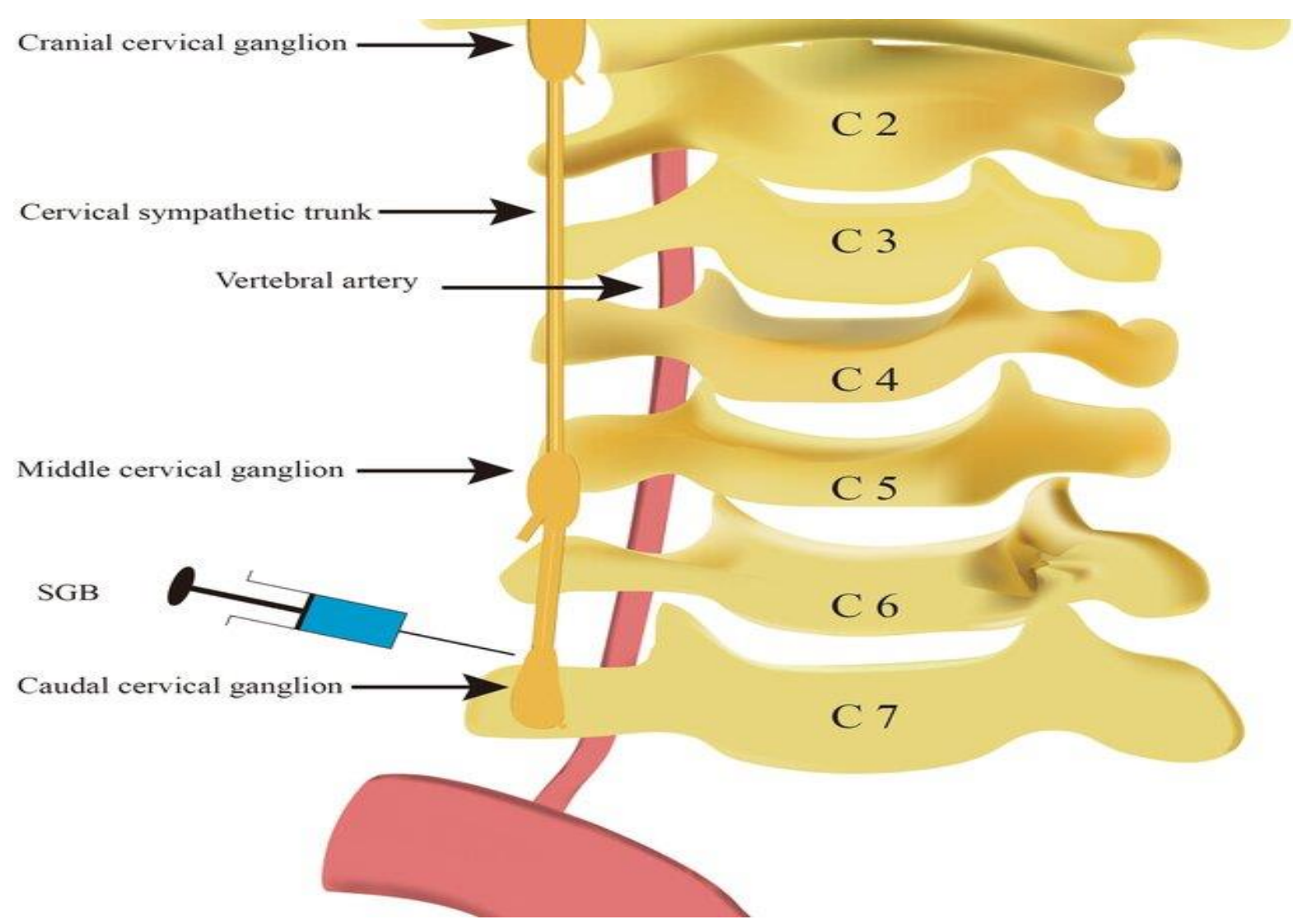
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Introduction

- Post-traumatic stress disorder (PTSD) is a major issue for frontline workers, triggered by extreme stressors.
- Stellate Ganglion Block (SGB) has shown promise in relieving PTSD symptoms by modulating the sympathetic nervous system through the stellate ganglion, located near the C7 vertebra [1,2].
- In 80% of individuals, the stellate ganglion is a fusion of the inferior cervical and first thoracic ganglia, while in 20%, they remain separate [3].
- SGB reduces sympathetic overdrive linked to elevated nerve growth factor and norepinephrine levels [3].
- This study explores the use of ultrasound-guided SGB to treat PTSD in frontline workers.



Methods

Study design: Experimental study conducted at a single center.

Population: Frontline workers suffering from PTSD symptoms.

Clinical measures: Evaluation of the efficacy of SGB in treating the following PTSD symptoms:

- Intrusive re-experiencing of traumatic events
- Avoidance of trauma-related stimuli
- Negative changes in mood and cognition
- Persistent physiological arousal and reactivity

Intervention: A total of six participants received SGB injections after obtaining institutional ethics committee approval. The first injection was administered on the right side, followed by the left side two weeks later. Depending on the patient's response, the procedure was repeated every three to six months. Epinephrine-free 0.25% bupivacaine was used as the local anesthetic [4].

Outcome measures: Participants completed a 10-question questionnaire evaluating their PTSD symptoms, focusing on:

- Hypervigilance
- Nightmares
- Intrusive thoughts
- Impact on activities of daily living

Analysis: The symptoms were assessed before and two weeks after the injection.

Results

- The findings suggest that SGB shows promise as a therapeutic option for frontline workers with PTSD, with significant reductions in symptom severity.
- Similar improvements were observed in symptoms like hypervigilance and intrusive thoughts.
- Rae Olmsted et al. [5] demonstrated in a 2020 randomized controlled trial with veterans on stable psychotropic medication that SGB significantly improved symptoms eight weeks post-block compared to sham injections.

Conclusion

- SGB offers a promising adjunctive treatment for PTSD in frontline workers, providing symptom relief and improving overall well-being. However, further studies with larger sample sizes are needed to confirm these findings.



 References