**ABSTRACT**

**Background:** Case series and popular press reports have indicated that some individuals with Post Traumatic Stress Disorder (PTSD) undergo rapid, significant, and durable improvements after treatment with Stellate Ganglion Block (SGB). These claims have yet to be tested in a randomized, controlled trial.

**Objective:** The effects of bilateral stellate ganglion block on mental depression; report of 3 cases. KARNOFSKY LI, GARDNER WJ. Cleve Clin Q. 1947 Jul;14(3):133-8

**Conclusion:** Although previous case series have suggested SGB offers an effective intervention for PTSD, the study did not demonstrate any statistically or clinically significant differences in CAPS and sham treatment on psychological or pain outcomes. Future studies should control for depression in treatment methods or patient populations to allow individuals with PTSD to benefit from SGB, but current evidence does not support widespread clinical use of the procedure for PTSD.

**Methods**

**Randomized Trial**

Military PTSD (not just combat) defined and measured by gold standard methods

Assessor and participants are blinded

2:1 Active to Sham ratio and all participants can crossover to SGB

Can get up to 2 SGBs

One week, one month, and three month outcomes

**Methods for Stellate Ganglion Block**

Ultrasound guidance

Overlying C5 or C6

Right Sided

7 cc 0.5% ropivacaine was injected

**Results**

CAPS Score in 27 participants who received SGB, and 15 controls who received a sham injection

Repeated measures ANOVA shows a significant (P<0.01) effect of time, but not of group, and no group x time interaction on PTSD scores

**SGB with Ultrasound**

**Adverse Events**

**Crossover**

CAPS Change after injection in 13 crossover subjects who received a sham and then an SGB injection

Paired t-test showed no significant difference

**Bottom Line**

We cannot demonstrate any advantage of SGB over sham injection for the treatment of PTSD

It is possible that SGB was under dosed, or that there are sub-populations that benefit

Previous case series were promising, and we shouldn’t give up yet.

**References**