Stellate Ganglion Block

Case Report

August 2, 2016

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Diagnosis

Post-Traumatic Stress Disorder

Intro

In March 2016, a 35-year-old male presented with his wife to Summit Family Medicine, and shared that he suffered daily from the residual effects of a traumatic brain injury experienced while in the military. Not only has he been fatigued and severely run down, but he also has frequent insomnia, panic attacks, anxiety, flash backs, and a decreased ability to enjoy life. Using the PCL-M score to evaluate Jose Ruiz, his score of 78 classified him as having severe PTSD. As the primary care provider of this patient, I shared the benefits of the stellate ganglion block. The patient was informed that a traumatic brain injury has a less certain likelihood of success, given the confounding factors of residual intracranial pathologies above the level of the Stellate Ganglion. After discussing the procedure with his wife, the patient requested to receive the treatment.

Treatment

Needle approach planned by Dr. Shawn Tierney, who examined the anatomy around Chassaignac's tubercle and the path of the vertebral artery, which is posterior to the C6 anterior tubercle, over the stellate ganglion and radicular arteries, and about the C6 anterior tubercle. Dr. Tierney also confirmed the location of the fascial plane between the longus capitus and longus coli, just anterior to Chassaignac's tubercle, as well as the path of the C5 and C6 nerve roots.

Through ultrasound guidance, 7cc 0.5% Ropivacaine was injected by Dr. Jeremiah Maloney, Anesthesiologist, around the stellate ganglion on the right side of the neck. Anticipated Horner's syndrome was achieved within 5 minutes of completion of the block. Patient was observed for any post procedural complications and none were noted.

Follow-up

The patient's score on the PCL was 78 prior to the Stellate Ganglion Block on May 25, 2016, and is 62 after the Stellate Ganglion Block on August 3, 2016. He reports that he does not know if it worked for him. He states that he still is paranoid that his children are going to get hurt, and his anger can flare from 0 to 100 in an instant. On some nights, he is sleeping better, but other nights he still reports insomnia. Patient was reminded that the stellate ganglion block outcomes are unpredictable in the context of a pre-existing traumatic brain injury. Patient reported no adverse effects from the procedure.

Results

PCL Score	Pre- Stellate	Post- Stellate
	78	62
% Reduction in PTSD Symptoms	26%	