

Letter to the Editor

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Letter to the Editor For: “Stellate ganglion block in disparate treatment-resistant mental health disorders: A case series”

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Dr. Niraj and colleagues reported the successful use of stellate ganglion block (SGB) as a treatment for mental health disorders (MHDs) that do not respond to standard management, known as treatment-resistant MHDs (tr-MHDs) [1]. This group of patients has limited options for managing their conditions. Autonomic dysfunction has been noted in the neurobiology of MHDs, including anxiety, depression, obsessive-compulsive disorder (OCD), panic disorder, and bipolar disorder (BD) [1]. SGB is an emerging treatment that reduces sympathetic activity and has shown benefits in managing post-traumatic stress disorder (PTSD).

In this report, four patients with diverse, tr-MHDs who received SGB were presented. The treatment led to improvements in BD, OCD accompanied by alcohol addiction, opioid addiction, and health anxiety. Dr. Niraj administered 9 mL of 0.2% ropivacaine and 20 mg of depot methylprednisolone for the SGB procedure [1].

I would like to commend the authors for their utilization of SGB for MHDs. There is extensive literature on the use of SGB for PTSD [2] as well as anxiety [3] and depression [3]. To the best of my knowledge, SGB has not been reported as effective in treating OCD, BD, or opioid withdrawal symptoms. I also agree that a common aspect of the tr-MHDs mentioned above is autonomic dysfunction, which may be linked to immune dysfunction. I would like to note that there has been a previous report indicating that SGB can significantly improve symptoms of schizophrenia [4], a condition that is also linked to

autonomic dysfunction [5]. Given that sympathetic dysfunction is widespread in various mental health conditions, it is probable that other potential uses for SGB will be identified in the near future.

When performing an SGB, bupivacaine and ropivacaine are commonly used as anesthetics without the addition of depot methylprednisolone or other steroids. Bupivacaine was first reported as a treatment for PTSD via SGB by the primary author in 2008 [6]. We strongly recommend avoiding the use of steroids in SGB procedures, especially particulate steroids. Routine administration of corticosteroid in these injections might be questioned because of the risk of intra-arterial injection into the vertebral, carotid, or spinal radicular artery. Specifically, particulate corticosteroids (suspensions such as methylprednisolone acetate) can cause an embolic stroke if unintentionally injected into any of these arteries [7]. Furthermore, the effectiveness of mixing steroids with local anesthetics for SGB has not been established, and the potential risks outweigh any possible benefits.

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