LETTER

Long-Term Follow-Up of Ultrasound-Guided Glossopharyngeal Nerve Block Treatment for Glossopharyngeal Neuralgia: A Retrospective Clinical Study of 43 Cases [Letter]

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Dear editor

Recently, an article titled "Long-Term Follow-Up of Ultrasound-Guided Glossopharyngeal Nerve Block Treatment for Glossopharyngeal Neuralgia: A Retrospective Clinical Study of 43 Cases" published in the Journal of Pain Research has captured our attention.[1] This study aims to evaluate the efficacy and safety of ultrasound-guided glossopharyngeal nerve blocks (UGPNB) in patients with glossopharyngeal neuralgia (GPN). UGPNB is an effective, repeatable, safe, and minimally invasive treatment for patients with GPN. We sincerely commend the remarkable contributions of this study and wish to offer some suggestions for consideration.

First, as a randomized clinical trial, this study avoids the repetition of previous studies, while improving the transparency and credibility of the study results. The innovative and important nature of this topic not only demonstrates that UGPNB is an effective, repeatable, safe, and minimally invasive treatment for GPN patients, but also potentially makes it a solid foundation and potentially impact more than the application of invasive intracranial surgery or neurodestructive methods, which will benefit academic research and clinical practice. However, the study included a small sample size, and even if there was no publication bias, the relatively small number of studies pooled could have contributed to the results.[2] And this study is limited to specific time frames and locations, which may not account for other potentially influencing variables, leading to certain biases in the results.

Secondly, this study evaluated the effect of UGPNB treatment on GPN patients, and confirmed the clinical characteristics, efficacy and safety of UGPNB treatment in GPN patients, which is a related field worthy of further exploration. Nevertheless, long-term follow-up of included randomized controlled trials (RCTs) may introduce potential biases, such as changes in patient medication use and changes in overall health, which may ultimately affect the results of the study.

Third, studies have fully proved that 52.3% of the patients with no pain relief or recurrence after UGPNB treatment chose MVD, which resulted in a great degree of pain relief.[3] Compared with MVD, UGPNB has a relatively low efficacy in the treatment of GPN for pain relief. Although UGPNB has the advantages of simplicity and minimally invasive treatment, the risk of local anesthesia poisoning, blood vessel puncture, hematoma formation and even upper airway obstruction should be carefully considered when UGPNB is performed. Even though MVD is associated with surgical risks such as penetrating artery injury and vasospasm in the treatment of GPN,[4] the application of MVD may be better than UGPNB in the future with the improvement of the quality of equipment used, the enhancement of surgical proficiency of surgeons, and the improvement of neurophysiological monitoring during surgery.

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In conclusion, we are very grateful for the work of You et al, whose clinical randomized controlled study has made a significant contribution to the treatment of patients with GPN, and our comments and recommendations only serve to enhance an already excellent study. We look forward to more high-quality research in this area to further consolidate the evidence-based efficacy of these treatments and bring greater benefits to patients with GPN.

Disclosure

The authors report no conflicts of interest in this communication.

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