

Comment on “Stellate Ganglion Destruction With Alcohol Versus Thermal Ablation for Chronic Post-Mastectomy Pain: A Randomized Trial”

TO THE EDITOR:

We read with great interest by Thabet et al on alcohol disruption of the stellate ganglion versus thermal ablation for chronic pain after mastectomy (1). We thank the authors for their efforts to shed new light on the treatment of chronic post-mastectomy pain. At the same time, there are some questions I would like to discuss with the authors.

The cervical sympathetic nerve chain consists of the upper, middle, and lower cervical ganglia. In about 80% of people, the lower cervical ganglion fuses with the first thoracic ganglion to form the cervicothoracic ganglion, also known as the stellate ganglion (2).

The key anatomical structures of the ultrasound-guided stellate ganglion block (SGB) were the carotid sheath, the longus cervical muscle, and the anterior tubercle of the 6th or 7th cervical vertebra (Fig. 1). Most successful SGB is often accompanied by eyelid ptosis, conjunctival congestion, and mydriasis. Some scholars even use the presence of Horner syndrome as a clinical sign of successful SGB. In this paper, the stellate ganglion was blocked by alcohol injection and radiofrequency (RF) thermocoagulation, which were located anatomically, but it did not seem to confirm whether the block was successful from the clinical manifestations. The occurrence of Horner syndrome in participants was not mentioned in the outcome measures. Some patients may feel uncomfortable with this syndrome, and the effects of alcohol injection and RF thermocoagulation on the nerves will last a long time, and the patients would suffer the discomfort for a long time. Therefore, I believe that in addition to complications such as local anesthetic poisoning and vascular puncture, the record and follow-up of Horner syndrome are equally important among the observational indicators.

The scope of nerve damage caused by RF thermocoagulation of the stellate ganglion is relatively limited due to its principle of action, while the diffusion of the alcohol injection solution is uncertain. Although the article demonstrated that the injection was in the sheath and thus limited its diffusion range,

it did not seem to specify how to assess whether it was in the sheath. In our hospital, under the guidance of ultrasound, at the level of cervical 7, the in-plane technique was used and 1 mL of 1% lidocaine was injected between the cervical longus muscle and the prevertebral fascia to block the obvious section planetary ganglion (Fig. 2). The diffusion path of the drug solution could be seen on the ultrasound guidance, and the drug injection pulse signal could be seen by Doppler, so as to determine the injection in the sheath. The patient also presented with drooping eyelids, conjunctival congestion and other Horner syndrome symptoms.

Finally, for the alcohol concentration of alcohol injection, the intermediate concentration of 50%-100% was selected in this paper. The concentration was not specified in this paper, and the basis for the use of the concentration was also not explained. More studies are needed to confirm the safety of stellate ganglion alcohol injection with longer follow-up.

Hui Li, MD

Department of Pain Management, West China Hospital, Sichuan University, Chengdu, Sichuan Province, P. R. China

Jun Ye, MD

Department of Pain Management, The Traditional Chinese Medicine Hospital of Longquanyi, Chengdu, Sichuan Province, P. R. China,

Xie Yang Ding, MD

Department of Pain Management, The Traditional Chinese Medicine Hospital of Longquanyi, Chengdu, Sichuan Province, , P. R. China

Ling Ye, MD

Department of Pain Management, West China Hospital, Sichuan University, Chengdu, Sichuan Province, P. R. China
Email: zerodq_hx@163.com

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