

Letters to the Editor

e Which is Effective and Safe Method for the Treatment of Trigeminal Neuralgia: Temperature or Active Tip?

TO THE EDITOR:

We read the recent article "Combination of pulsed radiofrequency with continuous radiofrequency thermocoagulation at low temperature improves efficacy and safety in V2/V3 primary trigeminal neuralgia" written by Ding Y et al (1) with interest. In the article, they described "CT-guided PRF combined with low-temperature CRF thermocoagulation for treating V2/V3 primary TN effectively relieves pain, increases late-stage pain remission rate, reduces complications, and reduces the rate of recurrence."

In our pain clinic, we follow the results of our patients who underwent radiofrequency thermocoagulation. According to our cases of radiofrequency thermocoagulation, we utilize an RF device, lidocaine HCL (Jetokain-Adeka) for infiltration, and 2mm active-tip RF electrodes (Trigeminal radiofrequency electrode 2mm-Cosman).

In addition to the treatment effect, complications are also important in evaluating the effectiveness of a treatment method., but the patient is also exposed to radiation and the total cost should also be considered.

Most of the treatments applied for trigeminal neuralgia have side effects. In our clinic, we have admitted patients who had severe complications such as anesthesia dolorosa related to the usage of electrode tips bigger than 2mm.

In conclusion, currently available treatment meth-

ods for trigeminal neuralgia cover a wide spectrum. This indicates that there is no simple answer to the question of how trigeminal neuralgia should be treated. It is so important that these difficult treatments should become safer by improving the experience of physicians and performing the procedures with safer devices.

We think that these types of scientific discussions will contribute to the positive effects of the treatment of trigeminal neuralgia.

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1. Ding Y, Li H, Hong T, Zhu Y, Yao P, Zhou G. Combination of pulsed radiofrequency with continuous radiofrequency thermocoagulation at low temperature improves efficacy and safety in V2/V3 primary trigeminal neuralgia. *Pain Physician* 2018; 21:E545-E553.

In Response: Mert Akbas et al: Which is Effective and Safe Method for the Treatment of Trigeminal Neuralgia: Temperature or Active Tip?

We would like to thank the editor for giving us the opportunity to respond to the letter from Mert Akbas and Bilge Karsli titled "Which is effective and Safe Method for the Treatment of Trigeminal Neuralgia: Temperature or Active tip?". This was in response to our paper titled "Combination of Pulsed Radiofrequency with Continuous Radiofrequency Thermocoagulation at Low Temperature Improves Efficacy and Safety in V2/ V3 Primary Trigeminal Neuralgia" (1).

We strongly agree with the author's opinions that in addition to the therapeutic effects, complications are also important in assessing the effectiveness of the treatment, and the total cost should also be considered. Most current treatments for trigeminal neuralgia have side effects, which means that there is no clear answer to the question of the best way to treat trigeminal neuralgia. We believe that both temperature and active tip are very important for effectiveness and safety. Our previous researchers found that temperature was significantly associated with recurrence rates and complications(2). Continuous radiofrequency thermocoagulation at 65 or 62°C minimized complications including facial numbness, but usually resulted in a higher recurrence rate. The pain relief rate after treatment at 75°C was slightly higher than 68°C. The incidence and sever-

ity of complications at 75°C were higher than at 68 °C, so patients were less satisfied at higher temperatures. (3) Our results showed that 68° C was a good choice for V2 / V3 trigeminal Neuralgia. However, if the patient's financial situation is not good and he can accept heavier numbness, we will increase the temperature appropriately.

The size of active tip is related to the extent of the site of action. Theoretically, the range of 5mm active tip is greater than 2 mm, and the damage to local tissue is also increased. But we have not observed this, which may also provide direction for our next research.

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