

Comment on “Efficacy Analysis of Temporary Spinal Cord Stimulation in the Treatment of Refractory Postherpetic Neuralgia”

TO THE EDITOR:

We appreciate the research by Xin Li et al (1), titled “Efficacy analysis of temporary spinal cord stimulation in the treatment of refractory postherpetic neuralgia”, on temporary spinal cord stimulation for refractory postherpetic neuralgia, but we still have some concerns about the study’s findings.

Postherpetic neuralgia primarily affects middle-aged and elderly patients. Many patients also suffer from various chronic diseases, such as diabetes, which can further exacerbate their conditions. In our clinical experience, we have observed that patients with poor blood glucose control have worse pain control. A recent study shows that blood glucose coefficient of variation has a high predictive value for the prognosis of patients with diabetes mellitus associated Herpes zoster (2). The authors did not address these factors in their study, which might influence the results.

When assessing and selecting suitable individuals for standardized analgesia regimens, several issues can arise: firstly, the definition of what constitutes an ‘ineffective candidate’ is ambiguous, and may lead to inconsistencies in the patient screening process. Secondly, the exclusion of patients with mental disorders may inadvertently result in many high-risk individuals being overlooked. In fact, mental disorders and pain often co-occur which is a significant factor.

Using generalized linear equations to evaluate repeated measurements is a valid method. However, a *P*-value of less than 0.05 simply suggests that at a particular point in time, the three groups are statistically different, but it does not specify which 2 groups are distinct, nor does it disclose the specific difference (mean difference or OR). Small sample size may lead to errors in interpretation of clinical significance. Expand-

ing sample size may improve test efficiency but may encounter extreme values turning statistics upside down.

We would also like to share some of our research on the difference between temporary spinal cord stimulation and radiofrequency in the treatment of postherpetic neuralgia. Our department included patients with subacute stage with disease duration ≤ 3 months and basic pain score ≥ 6 points (difficulty falling asleep due to pain or waking up with pain at night) with herpes zoster related neuralgia.

We compared the analgesic efficacy of short-term electrical spinal cord stimulation (tSCS) and radio frequency regulation (RF) in one month, 3 months, and 6 months after the treatment, and the data were preliminarily statistically analyzed (Table 1).

We found that 60 tSCS patients ($M = 41, F = 19$) had a preoperative NRS score of 6.7 ± 1.39 , while 41 RF patients ($M = 25, F = 16$) had a score of 7 ± 1.58 . The results showed that the NRS score of tSCS patients was lower than that of RF group (3.94 and 4.78, respectively, $P < 0.05$). However, there was no statistical difference in NRS scores between the 2 groups at 3 months and 6 months after operation. This suggests that spinal cord electrical stimulation is more effective than radiofrequency therapy in alleviating early postoperative pain scores.

In conclusion, we appreciate the authors’ research and their suggestion that temporary spinal cord stimulation is a safe and effective treatment for refractory postherpetic neuralgia. However, we believe that further research is needed to fully understand the effects of this treatment on patients with chronic diseases and poor blood glucose control. We also suggest including additional parameters such as duration of stimulation and amplitude while increasing the sample size.

Table 1. Comparison of treatment outcomes for patients with herpes zoster-associated neuralgia.

Treatment	Number of Patients	Gender Distribution	Preoperative NRS Score	Postoperative 1-Month NRS Score	Postoperative 3- & 6-Month NRS Scores
tSCS	60	M = 41, F = 19	6.7 ± 1.39	3.94	No sig. diff. mentioned
RF	41	M = 25, F = 16	7.0 ± 1.58	4.78	No sig. diff. mentioned

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2. Tang J, Zhang Z, Yao M. Predictive value of blood glucose coefficient of variation for prognoses in patients with diabetes mellitus-associated herpes zoster. *Pain Physician* 2024; 27:51-58.