

Enhancing Predictive Accuracy for Acute Herpetic Neuralgia Treatment: A Fresh Perspective on Pulsed Radiofrequency Therapy Research [Letter]

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Dear editor

We have taken a keen interest in the study recently published in your journal, titled “Predictive Value of Current Perception Threshold for Prognosis of Pulsed Radiofrequency in Patients with Acute Herpetic Neuralgia”.¹ While the study offers valuable contributions to the field, there are a few areas where additional considerations could enhance the robustness and applicability of the findings.

Firstly, although the study considered the distribution of herpes on both sides of the body, it did not extensively explore the specific characteristics of herpes zoster, such as the location of the lesions and the nature of the associated pain.² The presentation of herpes zoster neuralgia varies with the affected nerve ganglia, making detailed information on lesion sites critical for predicting treatment responses and outcomes. For instance, areas like the face and head are notably sensitive due to higher nerve densities, potentially resulting in intensified pain.³ Failure to thoroughly analyze lesion locations might overlook variations in treatment efficacy, consequently impacting the precision of Current Perception Threshold (CPT) evaluations and the customization of treatment plans.

Secondly, the article fails to address whether an analysis of collinearity among the variables, such as the calculation of the Variance Inflation Factor (VIF), was performed. As Table 4 illustrates, Zhao et al directly apply results from univariate logistic regression—including age, preoperative NRS scores, and CPT ratios at 5Hz and 2000Hz—to their multivariate logistic regression analysis without assessing collinearity among the variables. In terms of varying CPT ratios, post-herpetic neuralgia (PHN) may simultaneously impact multiple types of nerve fibers in specific pathological states, potentially exhibiting correlations even among CPT measurements targeting different fibers.⁴ A check for collinearity could significantly enhance the robustness and reliability of the model's outcomes.

To enhance patient care, a multidisciplinary approach to managing Acute Herpetic Neuralgia (AHN) should be adopted in the future. This can be achieved by establishing a collaborative treatment team that includes pain management specialists, neurologists, dermatologists, and mental health professionals, offering more comprehensive and effective management strategies. Such a team-based approach leverages the expertise of diverse professionals to tackle the complex and multifaceted challenges associated with herpes zoster neuralgia, thereby improving patient outcomes through an integrated treatment plan.

In conclusion, the insights into current perception thresholds in pulsed radiofrequency treatment presented by this study are invaluable. Nevertheless, realizing the full potential of such research requires more extensive collaboration. It is hoped that future studies will incorporate a broader range of perspectives, including those from traditional Chinese medicine and artificial intelligence technology, to deepen our understanding of acute herpetic neuralgia and refine treatment approaches.

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