

Investigating the Effectiveness of Electroacupuncture for Diabetic Peripheral Neuropathy and Exploring the Feasibility of Infrared Thermography as an Efficacy Assessment Tool: Study Protocol for a Randomized Controlled Trial [Response to Letter]

Ning Luo ^{1,*}, Je-Wie Low^{2,*}, Jian-Qiao Fang¹

¹The Third Clinical Medical College of Zhejiang Chinese Medical University, Hangzhou, Zhejiang, People's Republic of China; ²Institute of International Education of Zhejiang Chinese Medical University, Hangzhou, Zhejiang, People's Republic of China

*These authors contributed equally to this work

Correspondence: Jian-Qiao Fang, The Third Clinical Medical College of Zhejiang Chinese Medical University, Hangzhou City, Zhejiang Province, People's Republic of China, Email fangjianqiao7532@163.com

Dear editor

We would like to express our sincere gratitude to the Editor-in-Chief for providing us with the opportunity to respond to the letter from Agusalim et al concerning our study. It is an honor to have our research thoroughly reviewed by fellow scholars, and we greatly appreciate the interest and thoughtful comments from Agusalim et al. In this response, we will address their comments systematically, presenting a detailed point-by-point reply in the areas they highlighted.

In their letter, Agusalim et al point out that one of the limitations of our study was the absence of a sham electroacupuncture (EA) group, which may have introduced a placebo effect and potentially influenced the trial outcomes. We acknowledge that the lack of a sham EA group represents a limitation in the original study design. However, previous sham-controlled trials of acupuncture have often encountered complex intervention protocols and methodological challenges, which may have contributed to inconclusive evidence regarding the efficacy of acupuncture in treating diabetic peripheral neuropathy (DPN) and, consequently, limited its broader clinical application.^{1,2} And a cross-sectional study concluded that while sham acupuncture has been widely used, a waiting list or no-treatment control can also be considered an appropriate comparison.³ Therefore, to address this limitation and improve the reliability of our results, we referred to previous research^{4,5} and implemented a waiting list group that received 12 sessions of the same EA treatment at the end of the study period. This approach helped maintain participants' expectations of EA efficacy and minimized potential placebo effects. Second, we incorporated objective outcome measures, including nerve conduction velocity (NCV), regions of interest (ROIs), and glycated hemoglobin (HbA1c) levels, to further reduce bias and enhance the validity of our findings. In future studies, with adequate resources and funding, we plan to incorporate a well-designed sham EA group, which will allow for more rigorous control of placebo effects and provide clearer conclusions regarding the efficacy of acupuncture in treating DPN.

Secondly, this study was conducted primarily in three hospitals in Zhejiang Province because it is the first clinical trial to use infrared thermography (IRT) as an outcome measure for EA in treating DPN. Since environmental factors across regions may influence IRT data, we initiated this pilot study in hospitals within a single region to ensure more reliable results. We anticipate that the findings can be generalized to broader populations and different geographical areas.

Additionally, to minimize the potential for bias in the outcome assessment, as highlighted in the letter, we implemented blinding procedures for both the outcome assessors and the statistical analysts. We are confident that these measures are sufficient to ensure the objectivity and fairness of the study results.⁶

Finally, we sincerely thank you once again for your recognition and valuable suggestions. We look forward to future opportunities to conduct studies in diverse environments and cultural settings, further strengthening the generalizability and robustness of our findings.

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Yu B, Li M, Huang H, et al. Acupuncture treatment of diabetic peripheral neuropathy: an overview of systematic reviews. *J Clin Pharm Ther.* 2021;46(3):585–598. doi:10.1111/jcpt.13351
2. Ju ZY, Wang K, Cui HS, et al. Acupuncture for neuropathic pain in adults. *Cochrane Database Syst Rev.* 2017;12(12):CD12057. doi:10.1002/14651858.CD012057.pub2
3. Liu J, Li L, Luo X, et al. Specification of interventions and selection of controls in randomized controlled trials of acupuncture: a cross-sectional survey. *Acupunct Med.* 2022;40(6):524–537. doi:10.1177/09645284221117848
4. Musil F, Pokladnikova J, Pavelek Z, et al. Acupuncture in migraine prophylaxis in Czech patients: an open-label randomized controlled trial. *Neuropsychiatr Dis Treat.* 2018;14:1221–1228. doi:10.2147/NDT.S155119
5. Kwon HJ, Choi JY, Lee MS, et al. Acupuncture for the sequelae of bell's palsy: a randomized controlled trial. *Trials.* 2015;16(246). doi:10.1186/s13063-015-0777-z
6. Karanicolas PJ, Farrokhyar F, Bhandari M. Practical tips for surgical research: blinding: who, what, when, why, how? *Can J Surg.* 2010;53(5):345–348.

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Journal of Pain Research 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Journal of Pain Research editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Journal of Pain Research

Dovepress

Publish your work in this journal

The Journal of Pain Research is an international, peer reviewed, open access, online journal that welcomes laboratory and clinical findings in the fields of pain research and the prevention and management of pain. Original research, reviews, symposium reports, hypothesis formation and commentaries are all considered for publication. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/journal-of-pain-research-journal>

<https://doi.org/10.2147/JPR.S494648>