

# Acupuncture Based on Regulating Autonomic Nerves for the Prevention of Migraine without Aura: A Prospective, Double-Dummy, Randomized Controlled Clinical Trial [Letter]

Mingrui Xie

Medway NHS Foundation Trust, Gillingham, Kent, UK

Correspondence: Mingrui Xie, Medway NHS Foundation Trust, Windmill Road, Gillingham, Kent, ME7 5NY, UK, Tel +447747267027, Email [mingrui.xie@nhs.net](mailto:mingrui.xie@nhs.net)

## Dear editor

I read with great interest the study protocol by Zhou et al<sup>1</sup> investigating the role of acupuncture in managing migraines without aura. Migraines are debilitating for patients and it is good to see more non-pharmaceutical management options studied to determine their efficacies, hence I would like to share some thoughts on this.

It is interesting to note their previous study showing acupuncture was effective in preventing migraine attacks.<sup>2</sup> I appreciate this study design comparing acupuncture to the standard drug treatment to see which has better efficacy, so that if indeed acupuncture is better than pharmacological therapy, and like the authors mentioned have fewer side effects, then acupuncture could replace drug therapy. It would also be interesting to see if combining acupuncture and drugs has any additional benefits to patients as well. It is also worth mentioning that even though there are doubts on whether sham acupuncture is an effective placebo,<sup>3</sup> the authors have clarified in the protocol what they have done to make sham acupuncture a true placebo in their study, which would strengthen any significant results.

The inclusion criteria of patients aged 25–50 years old is noteworthy, as a recent cohort analysis<sup>4</sup> in China showed migraines are common in those aged 10–60 years old. I hope the authors can include a brief explanation on the reason for the age criteria. Another inclusion criteria is pharmacotherapy being ineffective in patients. This leads me to wonder whether there is already some bias, as surely flunarizine would not work and theoretically have the same effect as placebo, making this study essentially a comparison of acupuncture versus sham acupuncture.

The authors did a great job of detailing the experimental design, although I would like to know whether the randomization done was simple, block, stratified, or something else. This will allow other readers and I to better contextualize the results comparing the two groups.

The article mentions acupuncture being highly regarded in China, where the study will be carried out. I wonder how much of a psychological effect this has on patients and hence show results in favor of acupuncture, whereas in cultures less familiar with this technique, this could yield different results depending on how it is perceived and the public education surrounding alternative therapies. This means that even if results are favorable for acupuncture in this study, it might not work for a more apprehensive population. Moreover, proficiency of acupuncturists might differ between countries, thus affecting the efficacy in which the therapy is being delivered, which in turn could affect the results. In addition, flunarizine hydrochloride is not universally licensed across the world,<sup>5</sup> where some countries like UK and USA use different pharmacological management for migraine prophylaxis. It would be helpful to compare acupuncture to other drugs too to know the true efficacy of acupuncture in relation to different drugs.

Therefore, whilst I eagerly await the results of this study, it would also be interesting to see how the conclusion might change in different environments and cultures.

## Disclosure

The author reports no conflicts of interest in this communication.

## References

1. Zhou C, Bao J, Hu H, et al. Acupuncture based on regulating autonomic nerves for the prevention of migraine without aura: a prospective, double-dummy, randomized controlled clinical trial. *J Pain Res.* 2022;15:2211–2221. doi:10.2147/JPR.S372311
2. Zhou C, Bao J, Shao X, et al. Randomized controlled study of different acupoints selection principles based on autonomic nerve function in patients with migraine without aura. *China J Traditional Chin Med Pharmacy.* 2021;36(1):553–557.
3. Xiang Y, He J, Li R. Appropriateness of sham or placebo acupuncture for randomized controlled trials of acupuncture for nonspecific low back pain: a systematic review and meta-analysis. *J Pain Res.* 2018;11:83–94. doi:10.2147/JPR.S152743
4. Wang Y, Huang X, Yue S, et al. Secular trends in the incidence of migraine in China from 1990 to 2019: a joinpoint and age-period-cohort analysis. *J Pain Res.* 2022;15:137–146. doi:10.2147/JPR.S337216
5. Abu-Arafeh I. Flunarizine for the prevention of migraine – a new look at an old drug. *Dev Med Child Neurol.* 2012;54:204–205. doi:10.1111/j.1469-8749.2011.04152.x

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.S385406>