



Is scalp-based acupuncture and moxibustion better than conventional rehabilitation therapy for children with cerebral palsy?

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Comment on: Xue Y, Shi S, Zheng S, *et al.* Therapeutic effect of scalp-based acupuncture and moxibustion as an adjunctive treatment on children with cerebral palsy comparing to conventional rehabilitation therapy: a systematic review and meta-analysis of randomized controlled trials. *Transl Pediatr* 2022;11:631-41.

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We read with interest the literature by Xue *et al.* entitled “*Therapeutic effect of scalp-based acupuncture and moxibustion as an adjunctive treatment on children with cerebral palsy comparing to conventional rehabilitation therapy: a systematic review and meta-analysis of randomized controlled trials*” (1), which was published in the latest issue of *Translational Pediatrics*.

We greatly appreciate the authors for providing us with a meta-analysis to evaluate the efficacy of scalp acupuncture for children with cerebral palsy. Meta analysis revealed that application of scalp acupuncture treatment provides better curative effect than conventional rehabilitation therapy, and children with pediatric cerebral palsy benefit from scalp-based acupuncture therapy in terms of improving their symptoms, promoting their mental and psychological development, and improving their gross motor skills. Nevertheless, after a careful reading of this study, there are several concerns regarding this meta-analysis that need to be addressed.

Firstly, the literature search in this study has some flaws. To begin with, the investigators did not describe search

strategy in detail and manual search protocol. The search strategy they used may not find all of the articles related to this topic. Moreover, only one electronic database (PubMed) was systematically searched for eligible English literature. Thus, in order to make this meta-analysis more robust, we suggest that the authors include a complete search protocol and choose more electronic databases such as Scopus, Web of Science, MEDLINE, Embase and Cochrane Library to find eligible studies.

Second, although the authors claimed that their meta-analysis adhered to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) standards, some methodological deficiencies were found in the review (2). After careful review, we found that this review didn't register in PROSPERO and with no CRD number. Furthermore, this meta-analysis lacked essential data, such as quality assessment and detailed scores for selected studies, as recommended by PRISMA (2). What's more, this meta-analysis appears to contain an apparent mistake by the authors. According to the authors, *Tab. 1* illustrates the basic characteristics, intervention measures, outcome indicators,

and quality scores of the included articles. No quality scores of the included articles were seen in *Tab. 1*. We recommend use Jadad score to assess the quality of included studies (3).

Finally, in the results section, the investigators used a funnel plot to assess publication bias in the included studies in *Fig. 8*. However, funnel plot was used to evaluate publication bias in more than 10 articles. Additionally, although the publication bias was qualitatively evaluated using the funnel plot, in order to make it more reliable and legible, statistical testing to be a more quantitative method to assess it (e.g., Begg's or Egger's test). More than that, sensitivity analysis is necessary for meta-analysis, we noticed that the author didn't perform sensitivity analysis to make the results more convincing.

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Footnote

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have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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References

1. Xue Y, Shi S, Zheng S, et al. Therapeutic effect of scalp-based acupuncture and moxibustion as an adjunctive treatment on children with cerebral palsy comparing to conventional rehabilitation therapy: a systematic review and meta-analysis of randomized controlled trials. *Transl Pediatr* 2022;11:631-41.
2. Moher D, Liberati A, Tetzlaff J, et al. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ* 2009;339:b2535.
3. McCormick F, Cvetanovich GL, Kim JM, et al. An assessment of the quality of rotator cuff randomized controlled trials: utilizing the Jadad score and CONSORT criteria. *J Shoulder Elbow Surg* 2013;22:1180-5.

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