



Letter to the editor concerning “The efficacy of ultrasound-guided erector spinae plane block (ESPB) versus freehand ESPB in postoperative pain management after lumbar spinal fusion surgery: a randomized, non-inferiority trial” by A. Mirkheshti et al. (Eur Spine J [2024]: doi:10.1007/s00586-023-08101-9)

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To the Editor,

I read with great interest the study comparing the ultrasound-guided erector spinae plane block (ESPB) versus freehand ESPB in lumbar spine fusion surgeries [1]. I greatly appreciate the authors for evaluating these two types of ESPB and wish to provide my insights.

The authors state “there is no comparative study between the two approaches” [1]. However, a retrospective study compared these two methods of ESPB in this population by providing a continuous infusion through catheters placed by the surgeon in the erector spine plane [2]. Although this study was retrospective with a small number of participants, and with a slightly different methodology of an infusion [2], it could have at least been included for discussion. Also, it is better to use the term “surgeon-placed” or ‘surgical’ ESPB to make it further clear although the term “intraoperative freehand” is correct and acceptable.

The main contention is about the reporting of a non-inferiority trial and statistical analysis applied for the same. It should be specified for which outcomes the noninferiority hypotheses apply. There is no mention of this. Also, ideally, the noninferiority hypothesis should refer to the primary end point, i.e. whether the new treatment (freehand approach here) can offer other advantages such as lower cost or fewer unwanted effects. All these points should have been planned during the design of the study itself. Additionally,

the statistical analysis should compare the distribution of confidence interval with designated non-inferiority margin (Δ) and null effect preferably with a diagram depicting them [3].

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Declarations

Conflict of interest None.

References

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