Reviewer’s report

Title: An immediate effect of PNF specific mobilization on the angle of trunk rotation and the Trunk-Pelvis-Hip Angle range of motion in adolescent girls with double idiopathic scoliosis – a pilot study

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Reviewer: Sabrina Donzelli

Reviewer's report:

I want to congratulate with the authors for their effort to increase the current knowledge in conservative of AIS. I hope that this rejection will not discourage them in pursuing this attempt. The present research is a preliminary one, which is not yet able to add nothing new to the currently available knowledge.

In fact, the generalizability of the results and the clinical usefulness appear to me too limited to allow the publication.

According to what I understood after reading the article, the authors tested the immediate effect of a mobilization technique (in the method section you should describe the technique in details including timing, how many repetitions and duration of each session for example). In the present research the immediate effect was tested, and the authors state that PNF is effective for scoliosis treatment. This statement is not acceptable. First of all because the results you showed do not agree with this statement: you found a statistically significant difference in the ATR, but it is not clinically significant as it remains within the measurement error. In addition, it is strongly recommended in the SOSORT and SRS guidelines for research in the field of conservative treatment to test the efficacy of Physiotherapy in the long term if possible, or in the short term at least by meaning several weeks of treatment and not the immediate effects after one treatment session, as there is a higher risk to fall into the type I error.

Therefore, I encourage the authors to continue their study, by improving the methodology, according to the following suggestions:

* Define clearly the protocol, including duration of each session and duration of the entire treatment

* Include Risser score into your inclusion criteria, age is not sufficient to define the risks.
* If possible consider the long term observation.

* Pay attention to the mobilization effects, which can enhance scoliosis progression, as stated in the Guidelines for scoliosis conservative treatment. This can have also ethical implications.

* Consider the effect size and the Minimally Clinical Significant difference for the outcome measures you consider, search the literature, and calculate the sample size during research planning.

* Remember that to state that a treatment is effective for scoliosis treatment you should refer to Cobb angle.

* Follow the CONSORT guidelines when writing the manuscript.

Kind regards

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