



Randomized Controlled Study of IASTM vs. SHAM Treatment in Alleviating Symptoms Associated with Upper Trapezius Myofascial Trigger Points

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Dear Editor,

We read with great interest the article recently published article Randomizes controlled trial by Falame and Borres with the title “Randomized controlled study of IASTM vs. SHAM Treatment in Alleviating Symptoms Associated with upper trapezius myofascial trigger points” [1]. The Author must be applauded for looking into an important clinical topic and for incorporating a shamcomparison group to explore the specific effects of IASTM. Apart for this there are several methodological and statistical concerns that deserves clarification to improve the interpretation of the findings.

The study is a Randomized controlled design however there is no sample size calculation or statcal power analysis reported. Although significant differences were observed statistically. he inclusion of only twenty participants raises concerns regarding the adequacy of statistical power and the precision of treatment effect estimates. Small sample sizes may increase the risk of both false-positive findings and exaggerated treatment effects, thereby limiting the generalizability of study conclusions [2].

Although the study is described as a randomized controlled trial, there is no clinical trial registration number. Registration of randomized trials is strongly recommended by CONSORT and international committee of medical journal editors to promote the transparency in the research [3].

Additionally, there is no CONSORT flow diagram detailing the number of participants screened, excluded randomized lost due to follow up or included in the study. Reporting of participant progression through each stage of a randomized controlled trial is a key component of CONSORT statement and allows readers to assess potential attrition bias, recruitment efficiency, and the overall validity of the trial findings [3, 4].

The author reported significant within group changes using the paired t-tests and between group differences using independent t-tests. These tests provide preliminary evidence of effects of treatment., they do not directly state the primary question of whether the changes over time differs significantly between groups. For Randomized controlled trials with repeated measurements repeated measure ANOVA should be used if the data is normally distributed. because they evaluate the interaction between treatment group and time, providing a more robust assessment of intervention efficacy [3].

Another important point is that there Is absence of effect size estimates and confidence intervals. The manuscripts initially report p-value to demonstrate statistical significance. However, statistical significance alone does not adequately convey the magnitude or clinical relevance of treatment effects. Current recommendations emphasize reporting standardized effect sizes alongside 95% confidence intervals to facilitate interpretation of clinical importance and precision of findings [4].

The manuscript also does not provide a detailed baseline characteristic table describing participant demographics and clinical values. The pretreatment NDI and VAS rating are statically equivalent between the groups, other parameters like Age, gender distribution, symptom duration, occupational exposure and activity level are required for determining baseline equilance and external validity [5].

Finally, the discussion states treatment benefits Mechanotransduction fibroblast stimulation, collagen remodelling and neurophysiological mechanisms. These explanations are biologically

reasonable; the study did not assess any mechanistic outcomes directly. Therefore, such interpretation should be considered interpreted with caution until confirmed through studies specifically designed for evaluating physiological mechanisms [6, 7].

In conclusion, this study contributes valuable preliminary evidence regarding the effectiveness of IASTM for upper trapezius myofascial trigger points. Addressing these concerns in future trials would strengthen the evidence base and improve confidence in the application if IASTM clinically.

Author Contributions

Deep Shikha: Conceptualization, Data curation, Writing–original draft, Writing–review and editing.

Sunita Sharma: Writing–review and editing.

Conflicts of Interest

The authors declare no conflicts of interest.

Ethical Statement

Ethical approval not required, as this letter is based on an appraisal of previous published literature and did not involve human participants.

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