Reviewer’s report

Title: The effect of adding TENS to stretch on improvement of ankle range of motion in inactive patients in intensive care units: A pilot trial

Version: 0 Date: 01 May 2019

Reviewer: Dale Edgar

Reviewer's report:

Thank you to the authors for an interesting study and manuscript.

There are several major issues that the authors must rationalise before the manuscript is publishable. Firstly, were all ankle measurements completed by an independent assessor and were those measurements taken as passive movements? As a clinical study, the generalisability of results are in serious question as the differences between groups is small and within natural variance for ankle goniometric measurements. Further, if the measures were only recorded as passive, it is very difficult to consider the findings as unbiased. More detail is required for the reader to be able to interpret and apply the findings.

The study report also requires rework in terms of the quality of English. Please ask an academic health or medical colleague with English as their first language to carefully review the manuscript to correct multiple instances of anomalous grammar, spelling and expression.

This reviewer believes the manuscript can be publishable with the following changes and clarifications:

Abstract
1. Please correct typo - First sentence of Methods
2. Conclusion - please adjust and also correct grammar.

Introduction
3. Please review and shorten. In particular the explanation of other methods of reducing contracture is long winded and should be more focussed on justifying the choice of TENS as the intervention in this particular study.
4. Also, the authors could shorten the discussion about TENS mechanisms or move some of that padding in Introduction to Methods.

5. The Aim should be simplified and remove the caveat statement in parentheses.

Methods

6. Patient mean GCS was ~7 yet patients were able to consent to involvement? Please confirm this was the case or adjust the inclusion criteria.

7. Please confirm - was active ankle ROM or passive ankle ROM the primary outcome measure? If the latter, please justify that choice and explain how measurement was conducted without bias.

8. As there were three hospitals involved, was an independent assessor employed? How was inter rater reliability (standardisation) managed if not a single assessor?

9. Were the ankle ROM measures taken bilaterally on all patients? In view of the unilateral neurological disorders which led to many of the reason for admission, it is necessary to confirm this and to confirm exactly how the data from both sides of the body were treated in the analysis.

10. Were bilateral ankle data pooled or averaged prior to analysis?

11. Please reduce the description of the goniometric measurement of the ankle to one sentence with a reference. It is far too long and not necessary.

12. How were the patients blinded to the intervention? Was a sham TENS used?

Results

13. Despite the p value of the comparison, the study groups look quite unbalanced in respect to the cause of admission to ICU. Please explain and note as a limitation which could be quite significant due to the small sample size.

14. Please correct the spelling of TENS on the graph legends.
Discussion

15. Requires rework to focus the literature discussion on more pertinent references. Most studies quoted involved interventions at the knee, not the ankle. If the literature is diverse and, or sparse then the authors should not elaborate greatly as this pads out the subsection unnecessarily.

Conclusion


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal