Reviewer’s report

Title: The effectiveness of non-surgical interventions for common plantar digital compressive neuropathy (Morton's neuroma): a systematic review and meta-analysis

Version: 1 Date: 30 Oct 2018

Reviewer: Daniel Bonanno

Reviewer's report:

Please accept my apologies for the delay regarding the review to your manuscript. As you are aware, one of the original reviewers stepped down and we had difficulty sourcing alternative reviewers. To minimise further delay I have stepped in as a reviewer.

I thank the previous reviewers for their constructive feedback. I have considered their previous comments and the responses from the authors. My comments are therefore made in addition to what has previously been addressed.

General comments

The question posed by the authors is on a topic which I expect will be interest to readers of JFAR (and to an array of disciplines) and the article is generally well written. I have some comments/suggestions that require consideration. Please consider the 'non-essential' revisions simply as a 'suggestion' with action from the authors as optional.

Minor Essential Revisions

1) Title, abstract, and throughout the manuscript: The term 'efficacy' is normally reserved for findings obtained from RCTs. Given that many studies were from pre/post studies I think that 'effectiveness' is more appropriate for this systematic review. Please revise the title and content within the manuscript to reflect this. Please note that efficacy may be appropriate in some instances in the manuscript i.e. where the results have been exclusively derived from RCTs.

2) Throughout the manuscript. Please change 'data was' to 'data were'. As data is plural it should be written as 'data were…'.

3) Numbers: I notice that there is some inconsistency regarding how numbers are presented. In general, it appears that you have used words for the numbers one through nine, but for larger numbers you have used the actual number i.e. 12. This is fine, but please ensure that you do this consistently. For example, in the abstract it states '7 studies' and the later you use 'two'. In this example I suggest you change '7' to 'seven'. Please check the entire manuscript.

4) Background 4, line 89: Spacing issue after reference [3].

5) Methods, line 126: change 'levels' to 'level'.
6) Study selection, line 153: Should this be the 'fourth' reviewer given 3 different people (BM, RH, & MH) have already screened the full texts? Please review this and correct/clarify as required.

7) Risk of bias in individual studies, line 177: Should 'quality index' be 'Quality Index' as it's the name of a tool? Please check and revise throughout the manuscript as necessary.

8) Summary measures and synthesis of results: Please make it absolutely clear that findings from RCTs were not synthesised with pre/post data via meta-analysis. My initial concern when reading this review was that this may be the case, and I would like to make it absolutely clear to the JFAR readership that the data from RCTs and pre/post studies were handled different and separate from each other.

9) Figure headings: Similar to comment (8), can you please make sure that the reader can read the heading of the Figures/forest plots and know that the studies within are either RCTs OR pre/post studies (and not both).

10) Forest plots: At the bottom of the forest plots can you please label 'favours pre-test' and 'favours post-post' on the appropriate side of the plots.

11) Summary measures and synthesis of results, lines 225-228. An alternative to the traffic light system, and more widely used in systematic reviews, is a criteria developed by van Tulder et al (van Tulder M, Furlan A, Bombardier C, et al. Updated method guidelines for systematic reviews in the Cochrane collaboration back review group. Spine 2003;28:1290-9). In this criteria: Strong evidence=consistent findings among multiple studies including at least three high-quality studies; Moderate evidence=consistent findings among multiple trials, including at least three moderate-quality/high-quality studies or two high-quality studies; Limited evidence=consistent findings among multiple low-quality/ moderate-quality studies, or one high-quality study; 4. Very limited evidence=Findings from one low-quality/moderate quality study. Please consider if the Tulder system is better than the traffic light system for your review.

i. If you can mount an argument that the traffic light system is a better, then I suggest you consider reworking this sentence to improve fluency. I suggest something along the lines of: 'The figure and traffic light tool categorise interventions into three groups; (i) green to indicate an intervention with a high level of evidence (RCT or meta-analysis of RCTs) and a statistically significant reduction in pain, (ii) red to indicate an intervention with a high level of evidence (RCT or meta-analysis of RCTs) and no statistically significant reduction in pain, or (iii) amber for all interventions that don't align with the green or red categories.'

12) Line 302: Remove 'inflamed nerve' as this implies known pathophysiology.

13) Line 303: 'NUG' needs to be spelt in full in the 1st instance. I see this is done later in the manuscript (line 332).
14) Lines 311-313: I suggest you remove (or temper) the proposed mechanism of action unless this is 100% established. This review is focussed on clinical outcomes so there is no need to explain the potential mechanism of action in the results section (as this is not a 'result').

15) Varus/valgus foot wedge: The intervention is well described here. I suggest that this language is used consistently throughout the manuscript (see table where the term 'orthosis' is used). I suggest avoiding the term 'orthosis' in this context due to the nature of the intervention.

16) Results, Botox injection, lines 371-373: Provide results here as you have for the other interventions.

17) Discussion, lines 441-443: Please ensure this reads as a 'proposed mechanism', as it currently reads it seems factual.

18) Discussion, lines 447-448: I suggest you avoid the term 'abnormal'. Further, please consider rewording this sentence as, in additional to altering kinematics, foot orthoses can be used to alter plantar pressures, muscle activity, kinetics, etc.

19) Discussion, line 509: I suggest you avoid the word 'significant' in a scientific paper unless referring to statistics. 'Clinically meaningful' may be a more appropriate alternative here?

20) Discussion: In the final paragraph you point out that RCTs are needed. Is it worth briefly outlining the benefits of RCTs over pre/post studies? This will contextualise the studies included in this review and further strengthen the need for future RCTs. Here you could talk about the use of a control group and the benefits it can provide (accounts for placebo, Hawthorne effect, etc.).

Non-essential
21) Background: The paragraphs are very long but this may be unavoidable. Please consider breaking these down into smaller paragraphs if possible.

22) Background, line 85: this sentence is very long and may benefit from some commas, it could read as follows: '…intervention or, due to contraindications, are not suitable for surgery.'

**Level of interest**
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

**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/](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.