Author's response to reviews

Title: A case-series study to explore the efficacy of foot orthoses in treating first metatarsophalangeal joint pain

Authors:

  Brian J Welsh (bri.welsh@nhs.net)
  Anthony C Redmond (a.redmond@leeds.ac.uk)
  Nachiappan Chockalingam (n.chockalingam@staffs.ac.uk)
  Anne-Maree Keenan (a.keenan@leeds.ac.uk)

Version: 3 Date: 8 July 2010

Author's response to reviews: see over
8th July 2010

Dear Hylton,

Re: A case-series study to explore the efficacy of foot orthoses in treating first metatarsophalangeal joint pain

Thank-you for your correspondence and we are, again, pleased to have the opportunity to provide further revisions as requested by the reviewers. We have responded to each of the reviewer’s comments in the attached table, numbering each as they appeared in their reviews. We again have found the reviewers’ comments in general to be beneficial and constructive and believe that our paper is strengthened by the changes made at their suggestion.

Once again, thank-you for the opportunity to re-submit our revised manuscript.

Yours sincerely

Mr Brian Welsh
Dr Anne-Maree Keenan
Dr Anthony Redmond
Dr Nachiappan Chockalingam
### Reviewer Shannon Munteanu

**Abstract**

1.1 Methods paragraph: Please remove the additional full stop after the first sentence.  
Thank you for pointing out this grammatical error.  
*Action:* Additional full stop has been removed.

**Background**

2.1 Paragraph 3: Please amend ‘1st’ to have 1st as superscript.  
Thank you for pointing out this grammatical error.  
*Action:* 1st has been amended to 1\textsuperscript{st}

**Methods**

3.1 Paragraph 1: Please amend ‘1st’ to have 1st as superscript  
Thank you for pointing out this grammatical error.  
*Action:* 1st has been amended to 1\textsuperscript{st}

**Results**

4.1 Exploratory analysis: Please add P-values for analyses of changes in kinematics of 1\textsuperscript{st} MTP dorsiflexion as well as ankle/subtalar complex eversion  
The P-values have now been added.

### Reviewer Keith Rome

<table>
<thead>
<tr>
<th>Ref</th>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
</table>
| 1.1 | If participants with <40 degrees dorsiflexion were excluded then it should be stated in the methods section under inclusion/exclusion criteria. | This exclusion criteria was included in the methods section though this was perhaps unclear because a paragraph on 'sample size' spilt the inclusion/exclusion criteria.  
*Action:* The order of the paragraphs has been amended to make the section clearer to the reader. The word 'omitted' has been changed to 'excluded' to further emphasize the point. |
| 1.2 | The authors wrote "While the primary endpoint was 24 weeks, participants underwent interim clinical review after | The interim data from the figure have also been added to the text. |
8 weeks, at which time they were asked to complete again the pain subscale of the FFI. Further postal FFI(pain) questionnaires were administered, and telephone reviews were conducted, at 12 weeks as well as at the 24 week end-point”

Figure 3 shows the results from baseline. 8, 12 and 24 weeks but the results not reported. If data was collected, as stated in the methodology then should not the results be produced?

1.3 Still states 10 not nine participants.

The start of the gait analysis section on page 9, paragraph 3 states the 10 participants were invited to participate in this 2nd stage of the study. Data was collected for 10 subjects though as stated at the end of paragraph 2 on page 11 “The original dataset of 10 was reduced to 9 due to technical problems”.

Action:
No action taken. Ten participants were invited, it is later stated that the data for one of these was unusable and that the data from nine were used in the analysis.

Discussion

2.1 The comment “The difference was similar to those of 30mm [27] and 32mm [44] previously reported to represent an adequate analgesic response to treatment”. Please can you clarify the above statement as I believe the readership will not grasp the relevance of the statement?

The authors accept that this statement was worded in such a way that it may not have been clear to the readership the specific point that was being made.

Action:
We have amended the text to read as follows “Previous studies that have explored the level of pain reduction required on a 0-100mm VAPS, to offer individuals an adequate analgesic response to treatment, have concluded that this requires a 30mm reduction [27] and a 32mm reduction [44] in pain score. The 33.5mm reduction in pain score achieved in this study is therefore in excess of what has been advocated previously as an adequate analgesic response to treatment “.