

Reviewer's report

Title: Threshold for detection of diabetic peripheral sensory neuropathy using a range of research grade monofilaments in persons with Type 2 diabetes mellitus.

Version: 2 Date: 3 July 2008

Reviewer: Anita Raspovic

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Major Compulsory Revisions

1. Given that the presence and degree of diabetic peripheral sensory neuropathy (DPSN) was not measured by electrophysiology, it may be more appropriate to elect the more conservative 8-gramme monofilament as the primary threshold weighting. This would assist in avoiding false positive tests for DPSN.

Otherwise it is recommended that the paper discuss suitable approaches to dealing with this issue in the clinical setting. Clarifying information should be provided to clinicians around test interpretation. For example, it may not be an abnormal finding if a person with diabetes can not sense the 6-gramme monofilament but can feel the 8-gramme monofilament, given the margin for inaccuracy in the test at this level.

2. It is recommended that a statement be added in the limitations section acknowledging that a gold standard measure of DPSN was not drawn upon in this study; rather a clinical approach was utilized. This may make a recommendation for future research also.

Minor Essential Revisions

3. Abstract: The aims section within the abstract was somewhat difficult to fully understand until the paper was read through to the end. Perhaps this wording can be developed to offer first time readers slightly greater detail on which to frame the research that follows.

4. Abstract: Sentence 2 of the methods section. Wording suggestion - 'resulting' may read better if changed to 'resulted'.

5. Abstract Methods and Methods section: It is suggested that the anthropometric data and demographic variables are listed, particularly in the methods proper.

6. Background: The definition of diabetic peripheral sensory neuropathy (DPSN) is a good inclusion however the wording "of which they are unaware" is a debatable point. Many people with DPSN will be unaware of signs of nerve damage however others will be quite aware. It is suggested that this definition be modified to remove this reference.

7. Methods: It is not really clear throughout why there are two groups with diabetes included, although the underlying assumption is that the EST group is more likely to have some degree of DPSN due to the longer duration of diabetes. The purpose of this differentiation should be made explicit.

8. Results: It would be useful for the difference in gender ratio of groups to be noted, perhaps in the last sentence of the first paragraph in results.

9. Discussion: It may be beneficial for the reader if the uses of weighted monofilaments in patient education are elaborated on further.

10. Conclusion: Discussions around how the weighted monofilaments may be used clinically would be better placed earlier in the discussion section.

11. Table 1: Wording suggestion - remove the words 'To show' from the start of the title.

12. Tables in general: Consistency in the number of decimal places used for p-values is suggested, the Editors can advise on JFAR convention.

13. Figure 1a. It is easier to draw comparison if the same scale is used across figures of a similar nature. Although the difference in scale is clearly noted by the authors, it is recommended that Figure 1a be presented with the same scale as the other like figures.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.