Reviewer's report

Title: Development and Validation of the Patient-Rated Ulnar Nerve Evaluation

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Reviewer: Christine Novak

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BMC_1586562907792319: Development and Validation of the Patient-Rated Ulnar Nerve Evaluation

Major Compulsory Revisions

Material & Methods

1. The authors assessed patients with the PRUNE and compared it to the SF-36 which assesses health status. Did the authors consider also using an upper extremity questionnaire such as the DASH? It appears that many of the items in the PRUNE are also included in the DASH. It would be interesting and perhaps more relevant to assess how this new questionnaire compares to an upper extremity disability questionnaire.

2. Page 11-12. For the groups described in the construct validity analysis, was there a separate questionnaire given to the patients at each assessment? If not, how were these categories derived (such as global rating of change at 2 years as improved, versus no change, or worse; asymptomatic versus those who had mild-occasional, moderate, or severe symptoms; leisure was unlimited versus those who were limited)?

Results

3. In the text (perhaps at the beginning of the Results section), it would be useful to present the number of patients assessed. Were there any patients that declined to participate?

4. In the Results section or in the tables, it would be helpful to report the means and standard deviations for the PRUNE (with the sample size) at each assessment time.

5. Were there patients that were lost to follow-up? In Table 5 (24 month follow-up), there are different sample sizes for each set of data. Similarly in Table 6, I assume that the sample size is in the second row. Why are there over 75 subjects reported in these results and a decline in the results reported in the other tables? Were missing data deleted from that analysis on a pair-wise basis or was some other method used? The method used to handle missing data should be stated in the Methods.

6. Table 5. How did the authors determine the “ability to do activities” categories of “limited” and “not limited”? Also there are only 52 patients represented in these data. Were the remainder not assessed at 24 months?
7. Page 13. If the PRUNE questionnaire asks patients about their “average experience over the past week”, then I believe that all of the items fall into one classification (rational). If all of the items are in one classification, then is this a 2-level classification as indicated on Page 10.

8. On page 16, Tables 6 and 7 are cited as information regarding the factor analysis. I do see this information in these tables. The table numbers should be verified. Also the details regarding the factor analysis should be reported in the Results. It is stated in the Discussion on page 19 but not in the Results.

Discussion

9. Page 18. The authors report a minimal detectable change of 6.2 for the PRUNE. Is this reported in the Results? Perhaps I missed it, but this should be reported in the Results section.

10. Page 18. The authors state “lower reliability (although still excellent) on the usual activity subscale may be partially explained by the fact that it is only 4 items”. The section with “other symptoms” also has 4 items. I would suggest deleting this explanation based on the number of items and would suggest that it may be more related to the broad categories.

Minor Essential Revisions

Abstract

11. There is no clear study purpose stated in the abstract; other than the reason for the need for this questionnaire. I would suggest that a statement similar to the one in the introduction should be included in the abstract.

Introduction

12. In the first paragraph, the statement regarding the prevalence requires a reference. I think that it would be more representative to also include a reference from North America.

13. At the end of the Introduction, the authors have stated “ulnar nerve injury”. I would suggest changing this to “ulnar nerve compression” unless the intent of this measure is to assess both. However in this study only patients with ulnar nerve compression were included in the sample.

Tables & Figures

14. Figure 3 is not cited in the text. Also why did the authors choose to report the data at 3 months? Why not include 24 month assessment?

15. Table 6. The asterisk should be defined in the table legend.

16. Table 7. Why are some values highlighted?

17. Table 8. There are no values for the PRUNE total score. Should the mean change be a negative value indicating improvement from pre-op to 24 month follow-up? Also what was the sample size for this analysis?

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.