Reviewer’s report

Title: Comparison of single-dose radial extracorporeal shock wave and local corticosteroid injection for treatment of carpal tunnel syndrome including mid-term efficacy: A prospective randomized controlled trial

Version: 0 Date: 03 Sep 2017

Reviewer: Tomasz Wolny

Reviewer’s report:

General comments

Shock wave therapy has recently been increasingly used in conservative treatment of CTS. So far, all the studies have shown beneficial effects of shock wave therapy. However, there are large methodological discrepancies, so further studies of shock wave efficiency in conservative CTS treatment are needed. It is also important to evaluate how a single shock wave therapy session affects the symptoms, function, pain, and nerve conduction that is the subject of this article, and how long these changes persist.

Abstract

The summary is written correctly and contains all the necessary information.

Introduction

In general, the introduction introduces well to the subject matter in this article. However, in the second paragraph, the authors cite only some of the work on the effectiveness of corticosteroid use in conservative treatment of CTS. On this basis, authors of this article suggest that treatment with corticosteroids gives only short-term improvement. However, there are some works that point to the positive long-term effects of this type of therapy (Hagebeuk 2004, Ayhan-Ardiç 2000). In these studies, beneficial effects persisted 6 months or even 1 year after therapy. It would be useful to explain why in this work the effect of using corticosteroids had only short-term?

Subject and method

Design

No comments.

Participants
I do not understand why only a hand with more severe symptoms was being treated? Why did not therapy be given to both hands? This needs clarification.

Why the description of who performed the study and when it was done and who was eliminated from the study is in the "Participants" section. Could it be better to create a section called "Randomization and allocation" or "Blinding procedures"?

It is assumed that in this type of work enrolled, allocation and lost to follow-up is shown on the flow diagram.

Intervention

No comments.

Outcome measures

No comments.

Data analysis

No comments.

Results

The first paragraph can replace the flow diagram (see the comment above). There are no information in Table 1 how many unilateral and bilateral CTS were. There is also no p-value for gender and severity. This could be check by a Chi2 test.

Discussion

Discussion is well written and compares the results obtained with own studies with results from other studies. Authors also see the limitations of the study.

Conclusion

No comments.

References

References relevant to the topic of work.

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

Yes

**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.

Yes

**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.

Not relevant to this manuscript

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

Acceptable

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