Reviewer’s report

Title: Dry needling in a manual physiotherapy and therapeutic exercise protocol for patients with chronic mechanical shoulder pain of unspecific origin: a protocol for a randomized control trial

Version: 1 Date: 13 Dec 2016

Reviewer: Jan Dommerholt

Reviewer's report:

1. The authors mentioned that one of the treatment approaches for MTrPs is ischemic compression, but that is an outdated concept. MTrPs are thought to be hypoxic already and causing ischemia is not an appropriate treatment option.

2. The Kietrys et al study is not a very convincing study.

3. Why only one DN treatment session? Is that not the flaw of other studies including the study by Arias-Buría et al? In which clinical setting is DN only used in one session especially for "complex painful conditions?" Would it not make more sense to include DN for multiple sessions? Why is needling done only once, but exercise and manual therapies twice weekly? Are you really going to make a "new contribution in the field of chronic shoulder pain treatment?"

4. The word "escapulohumeral" is not a word in the English language.

5. In the dry needling protocol, the authors wrote that "the most painful" MTrP will be needled. How will the pain level be determined?

6. The use of a Streitberger needle is not accepted universally as a valid placebo needling procedure. The fact that it has been used in another study is probably not enough of a justification. This reviewer would recommend to include a brief discussion about the validity of using a Streitberger needle.

7. This reviewer finds it confusing when at times the authors write in the past tense suggesting that the study has been completed already while at other points, they talk in the future tense, i.e., the following descriptive characteristics were collected vs. Participants will mark the intensity of their pain. It would be preferable to use future tense consistently.

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.

Unable to assess

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