Reviewer's report

Title: The impact of subacromial impingement syndrome on muscle activity patterns of the shoulder complex: a systematic review of electromyographic studies

Version: 2 Date: 23 November 2009

Reviewer: Eric J Hegedus

Reviewer's report:

Major:
1. The title needs to be changed because the authors elected to exclude studies that had subjects with large and massive rotator cuff tears, which, by definition, are subjects with stage 3 impingement. The title should reflect stage 1 and 2 impingement as the subject of this review

2. Under your section entitled "assessment of validity", you do not note any disagreement between 2 independent reviewers when using the CASP tool. Not only will the readers not believe that there was absolutely no disagreement, I find it hard to believe also. For disagreement, how was it solved and who adjudicated a tie?

3. Please comment, in 1 or 2 sentences on the validity/reliability of the CASP tool if, indeed it has been found reliable and valid. If it has not, then state this lack of validity/reliability as a weakness in your discussion section.

4. There should be some discussion/analysis of the findings of higher quality studies vs lower quality

Minor essential:
1. In the "validity" section of your paper, you talk about examiner bias. Should it not be in the discussion section as a weakness of the literature that you reviewed.

2. Define Type II error for the reader as missing a relationship that may be present or some other such wording.

3. There are numerous punctuation errors, please go back through the paper and edit. In addition, the use of "it" as the subject in a sentence is not acceptable in formal writing (It is not correct.) but happens on lines 304, 317, 325, 352, and 363 to name a few.

4. This as a subject is also unacceptable when there is no noun following (This leaves the reader unsure what this refers to). Please correct this error in lines 74, 270, 293, 298, 307, 346, 351

5. There are many missing citations. Find and correct! Some areas are line 151, 185, 213, 215, 246, 248, 249

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:
I declare that I have no competing interests