Reviewer’s report

Title: The relative timing of VMO and VL in anterior knee pain: a systematic review and meta-analysis.

Version: 1 Date: 16 August 2007

Reviewer: Rudolf W. Poolman

Reviewer’s report:

Re: 'The relative timing of VMO and VL in anterior knee pain: a systematic review and meta-analysis.'

Rachel Chester Ms, Toby O Smith Mr, David Sweeting Mr, John Dixon Dr, Sarah Wood Ms and Fujian Song Dr

BMC Musculoskeletal Disorders 1426035432151012

Research article

Date: 16-08-2007

Reviewer: Rudolf Poolman

Dear Editor,

General

Thank you very much for the opportunity to review this paper. I congratulate the authors on their study. Overall this is a well written and informative manuscript suitable for publication after revision.

1. Is the question posed by the authors new and well defined?

Although the question addressed in this systematic review is not new, this the first systematic review addressing this issue.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

To evaluate this I used the validated Oxman and Guyatt index for SRs.


2A) Were the search methods used to find evidence (original research) on the primary question (s) stated?

Yes

2B) Was the search for evidence reasonably comprehensive?

Yes

2C) Were the criteria used for deciding which studies to include in the overview
reported?
Yes

2D) Was bias in the selection of studies avoided?
Yes

2E) Were the criteria used for assessing the validity of the included studies reported?
Partially
The authors undertook a qualitative critical appraisal of each study, the manuscript would benefit from a detailed description of this critical appraisal presented in the methods section and its results in the results section. In the present manuscript the results of the appraisal are presented in the discussion. Please move from discussion [page 9] to results section. Limited info on primary study methodology is presented in the abstract's results section.

2F) Was the validity of all studies referred to in the text assessed using appropriate criteria (either in selecting studies for inclusion or in analysing the studies that are cited)?
Can't tell
Please provide more info on the validity assessment utilized in the methods section and present its results in the results section.

2G) Were the methods used to combine the findings of the relevant studies (to reach a conclusion) reported?
Yes

2H) Were the findings of the relevant studies combined appropriately relative to the primary question the overview addresses?
Can't tell
I am in doubt what the best way is combine the results. Should the data be pooled? The pooled results suffer from strong heterogeneity. Therefore, pooling of the results may give flawed conclusions. Perhaps it is better to present the figures without totals or subtotals overcoming the heterogeneity issue. I tend to refraining from pooling due to strong heterogeneity. I wonder what the other reviewers think about this. The authors are applauded in discussing possible sources of heterogeneity in the discussion but should consider refraining from pooling the data.

2I) Were the conclusions made by the author(s) supported by the data and/or analysis reported in the overview?
Partially
This point strongly correlates to the point discussed above. The Authors conclude “a clear trend was demonstrated”. At least this should be rephrased to a trend [delete clear in abstract and discussion]. Furthermore, of the 18 included
studies only a very small number had sufficient data facilitating data abstraction for subsequent pooling.

2J) How would you rate the scientific quality of the overview?
I think this SR/MA has minor flaw that will need clarification (points 2 E,F,H,I) before publication.

3. Are the data sound and well controlled?
Please see above.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
The authors followed the QUOROM guideline in most aspects.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
Please see above.

6. Do the title and abstract accurately convey what has been found?
Reading the title it was unclear to me whether or not this was an intervention study. The title would benefit from adding “the aetiology of”: “The relative timing of VMO and VL in the aetiology of anterior knee pain:”

- Major Compulsory Revisions
Please see points 2E,F,H, and I discussed above.

- Minor Essential Revisions
It would be helpful to summarize the possible sources of heterogeneity in an additional table.

- Discretionary Revisions
None

What next?
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- Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest
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- An article of importance in its field

Quality of written English
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- Acceptable

Statistical review
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Is it essential that this manuscript be seen by an expert statistician?
- No, the manuscript does not need to be seen by a statistician.

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

Looking forward to the next version of the manuscript.

Kind regards,

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What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

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