Author's response to reviews

Title: The reliability of three-dimensional scapular attitudes in healthy people and people with shoulder impingement syndrome.

Authors:

Jean-Sebastien Roy (jean-sebastien.roy.1@ulaval.ca)
Helene Moffet (helene.moffet@rea.ulaval.ca)
Luc J. Hebert (ljhebert@videotron.ca)
Guy St-Vincent (guy.st-vincent@rea.ulaval.ca)
Bradford J. McFadyen (brad.mcfadyen@rea.ulaval.ca)

Version: 4 Date: 14 June 2007

Author's response to reviews: see over
Dear Doctor Saltman:

Please find the revised and final version of the manuscript entitled: “THE RELIABILITY OF THREE-DIMENSIONAL SCAPULAR ATTITUDES IN HEALTHY PEOPLE AND PEOPLE WITH SHOULDER IMPINGEMENT SYNDROME” (MS: 1129382421124100). Again, we would like to thank the reviewers for the time and energy they put in the review process of this article. We would also like to thank BMC Musculoskeletal Disorders for accepting to publish our manuscript.

Minor changes were made to the manuscript following the comments of Dr P. Ludewig. The next page responds to some of the comments raised by Dr Ludewig.

Sincerely yours,

Jean-Sébastien Roy, PT, M.Sc.
Ph.D. candidate
Center for Interdisciplinary Research in Rehabilitation and Social Integration
525, Hamel Boulevard
Quebec City (Quebec) G1M 2S8
Phone: (418) 529-9141 ext 6559
Fax: (418) 529-3548
E-mail: jean-sebastien.roy.1@ulaval.ca
Reviewer: Paula M Ludewig

Additional minor points

1. The abbreviation A-PT was spelled out of the abstract and replaced by anterior-posterior tilting (Abstract; results section): “Higher levels of intersession reliability were found for the method of calculation relative to the trunk in anterior-posterior tilting at 70° of flexion compared to the method of calculation relative to the scapula at rest.”

2. Change was done, “should be used” was replaced by “can be” (Abstract; conclusion section): “The estimation of three-dimensional scapular attitudes using the method of calculation relative to the trunk is reproducible in the three arm positions evaluated and can be used to document the scapular behavior.”

4. As suggested, we added that SIS subjects had a shoulder X-ray (Method; Subjects selection; first paragraph): “Exclusion criteria were: bilateral SIS; calcification and fractures (evaluated by X-rays); …”

5. We think that in the first paragraph of the Measurements part of the Methods, it is clearly specified that the trunk was re-palpated in each test position: “For each trial, nine body landmarks were digitized using the Optottrak probing accessory (Figure 1).”

7. Clarifications were added in the last paragraph of the Method (Data analysis) as follow: “Significant differences in reliability between groups and between methods for the healthy subjects were determined when the 95% CI of the ICC and the SEM were not overlapping.”

8. As suggested, “significant higher” was replaced by “significantly higher” in the Results and the Discussion.

9. Change was done, significant differences in L-MR was actually at rest, and not at 90° of abduction (Results; last paragraph): “Significantly higher levels of reliability were also found in the non-impaired shoulder of subjects with SIS compared to healthy subjects for the SEM in L-MR with the arm at rest and in PRO-RET at 70° of flexion.”

10. As suggested, more conservative wording was used in the Discussion, third paragraph: “It has been shown that people with SIS present changes in shoulder muscle activation during arm elevation, which may be associated with the reduction of the acromiohumeral distance. These observations show that SIS shoulders may not perform the adequate movement strategy to avoid impingement and that persons with SIS seem to use the same repetitive movement pattern over time, which leaves a very small range of possible scapular motion.”

11. Change was done in Table 1. One “men” was replaced by one “man”.