Reviewer's report

Title: Impact of movement training on upper limb motor strategies in persons with shoulder impingement syndrome

Version: 1 Date: 6 May 2009

Reviewer number: 3

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Subject recruitment
1. The duration of disease averaged to be around 10 months for all three SIS groups, however the (SD) were as high as 9.0 and 10.8. Please indicate the range of the duration of disease and comment on whether or not this high SD would affect the results.

2. The mean age of subjects was over 45. Is this age group more prone to SIS? Do authors have the information on the general age group for SIS in other clinics? Do the results represent only middle-aged subjects? If so, this should be reflected in the title of the article.

3. What are the professions of these subjects? Are they all of similar professions? If not, would this affect the results?

4. Do subjects participate in any sports? If so, what are the levels of participation? Do the difference in the levels of sports participation affect the results?

5. The SISele and SISdep subgroups should be introduced and defined in this session rather than in the Comparison between control and SIS groups and subgroups of the

6. Results Part. Particularly, should not appear after “Table 1” in which these subgroups appeared.

Method
1. In the Study design Part:
   # What was the rationale for E4 to be taken 24 hours after movement training with feedback?
   # DASH questionnaire should be provided as an appendix

2. In the reaching Part:
   # What was the rationale of performing 10 trials? (and in the extrinsic feedback Part)
   # What was the position of the forearm, supinated of pronated? Does this position affect the results?
3. In the Kinematics Part:
# Which were the fourteen bony landmarks? Please indicate

4. In the EMG Part:
# What level of serratus anterior were the electrodes placed?

Results
In Table 1, better also put the number of male subjects (%) as well, not just the female subjects and let readers work it out.

Discussion
1. Do the authors have any physiological explanation why is there only short-term effect on the relief of pain?

2. Since there is only temporally relief of pain, what clinical significant would there be?

3. With the result from this experiment, do the authors suggest earlier intervention to patients suffering SIS?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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