Reviewer's report

Title: Tai Chi and Vestibular Rehabilitation Improve Vestibulopathic Gait via Different Neuromuscular Mechanisms: Preliminary Report

Version: 3 Date: 27 November 2004

Reviewer: Tim C Hain

Reviewer's report:

General

This is an uncontrolled study of 36 subjects with vestibular disorders, randomized to vestibular rehabilitation or Tai Chi exercises. The two groups did equally well overall, but differed in how they accomplished this outcome, mainly in mechanical energy expenditure at the ankle, leg and hip.

This second revision is greatly improved. The statistics has been modified, although I will have to defer to the other reviews as to whether the treatment is adequate. All of my major comments were addressed, leaving only minor, largely stylistic suggestions.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

In 2-17 the general and somewhat vague term “vigorous gait” seems out of place in the conclusion of a basic science article, especially when it seems to be used to describe a redistribution of mechanical energy. Does the term “vigorous gait” mean that more mechanical energy is expended at the ankles compared to the hips? This comment was also in the first and second reviews.

3-16. Once again, “soft unfocussed gaze” advocated in the author’s variant of TC does not obviously indicate to this reviewer that persons with TC are not trying to see what they are doing. Rather, it seems to this reviewer that there is a different emphasis between TC and VR. In VR, many exercises combine considerable visual stimulation (i.e. checkerboard) with head movement. In TC, this isn’t the case.

11-8. How does the finding of a statistical difference within groups suggest that there are “clinically important differences”? With a big enough “n”, nearly any difference can be statistically significant, but this does make it clinically important.

11-13. “overall” should be “overall”.

14-5. Again the “clinically important trends” suggestion does not follow.
15-17. Again, the term “a more vigorous gait” is used.

17-12. “in diagnostic proportions” is awkward.

**What next?:** Accept after minor essential revisions

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

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes

**Declaration of competing interests:**

I declare that I have no competing interests.