Reviewer's report

**Title:** Neck pain and postural balance among workers with high postural demands

**Version:** 1  **Date:** 1 December 2010

**Reviewer:** Julia Treleaven

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This study has been conducted reasonably well although the number of normal subjects who failed the unilateral stance test is quite high based on normative data for this age group (Vereeck et al., 2008). I am wondering whether the exclusion criteria were sufficient to take out all other possible causes of disturbed balance.

The emphasis on the single leg stance is important as there were no differences between rhomberg eo, or perturbation and only other difference found was rhomberg ec CEA and rambling.

Specific points

Abstract: 3 different “tests”
Be consistent with p values = or <.

“The” simple

81 vs 61% significant difference thus a lot of false positives in the group without pain.

Background

Page 4 para 1 reference for elderly patients.

Methods

Page4 – other exclusion criteria – eg vestibular pathology, CNS dysfunction, etc etc

Trauma on day of trial- define this-

Page 6 Unilateral stance – dominant “foot” not food.

Rhomberg – eyes open why only one trial and other tests 3 trials.

Page 8 figure X – should this be figure 2.

Back pain as a confounder- how was this determined and established- how much back pain. Did this account for failure rate of unilateral stance.
Discussion-
Trembling not really a difference when adjusted for back pain.

Page 11 para 2- bit confusing re point trying to make.

Page 12 2nd para last line- 61% of the non pain group failed also- this would make the test sensitive but not specific. – Was age a factor in whether subjects failed or not??

I think more discussion on why the non pain group was so high with this as well. even though statistically significant difference between groups.

Limitations- need to discuss more.

Figure 2 caption the “vertical”

Tables
Setting out could be better to see differences between groups and easier to read.

SD. between numbers not ,

Other comments
What about concurrent back pain in demographics- how many in each group had back pain. Did this influence failure rate of single leg stance.

Was the time that they could maintain unilateral stance considered and were there differences between the groups?

Were there any correlations between fail single leg stance and age, days of neck pain, concurrent back pain etc.??


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, but I do not feel adequately qualified to assess the statistics.

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