Reviewer's report

Title: Association between osteoporosis and benign paroxysmal positional vertigo: a systematic review

Version: 2  Date: 31 March 2014

Reviewer: Terry Fife

Reviewer's report:

Nice review done with evidence-based methodology.

Major Compulsory Revisions:
1. The results section does not specifically discuss the findings of reference 13 (Mikulec 2010) even though on page 7, line 20 refers to its findings.
2. Page 7, lines 18-20 seems overstated. I think the studies reviewed show and association between osteoporosis and BPPV and that certainly suggests osteoporosis/osteopenia as a cause but does seem strong enough to "confirm" the causal relationship.
3. Page 8, line 8. I think along with the Vibert 2008 study (ref 20), the authors should include Jang YS1, Hwang CH, Shin JY, Bae WY, Kim LS. Age-related changes on the morphology of the otoconia. Laryngoscope. 2006 Jun;116(6):996-1001.
4. Page 14 in References. Reference 1 and 9 should state von Brevern M instead of von BM.
5. Figure 1. at the bottom indicates 8 controlled trials but text says there were 7.

Minor Essential Revisions:
1. On page 5, line 13, rephrase "All studies were non randomised... to "None of the trials were randomized controlled trials (RCTs)
2. Page 8, line 3. change to "observational study and is not a long-term ..."
3. Figure 1. bottom right the word "studies" should be capitalized to be consistent with other inclusion criteria.

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have not competing interests