Reviewer's report

Title: Carpal tunnel syndrome and the use of computer mouse and keyboard A systematic review

Version: 1 Date: 7 December 2007

Reviewer: Poul Frost

Reviewer's report:

Major compulsory revisions

1. This article is a review of the epidemiological evidence of computer work as a cause or risk factor for Carpal tunnel syndrome (CTS). The review conclude that the relevant evidence is insufficient, based on 5 epidemiological studies. The question has been addressed in the recent review by Palmer et al, (Occupational Medicine 2007;57:57-66), also mentioned in this manuscript, on occupation and CTS which likewise, concluded that the evidence did not indicate an important association between computer use and CTS. That review included 4 of the 5 epidemiological studies assessed in this manuscript. I think it is of major importance that the authors in their introduction explicitly address the conclusion about computer work and CTS in the review by Palmer et al. and also point out why a new (extended to other/similar exposures and experimental studies) review in the area is needed.

2. The discussion must also address the conclusion in the Palmer review.

Minor essential revisions

1. On page 4 the selection criteria are given. It is unclear how each step for selection of relevant articles was performed. How were articles selected for abstract reading? How many abstracts were read? How was full articles selected. Including a flow diagram in the result section with explicit inclusion and exclusion criteria would help to make this clear.

2. On page 5 the exposure criteria for inclusion in the study is stated to be computer work (mouse or keyboard). Based on this definition one might expect the study by DeKrom el al. to be irrelevant, since the exposure in that study was "typing" prior to case sampling during 1983 to 1985, where computer use might have been uncommon.

3. The authors need to state the criteria for their assessment of the validity of each selected study.

4. On page 7 the authors must define how the evidence categories are defined. What should be understood as e.g. ++ sufficiently evidence?

5. I would like the authors to give some consideration of the implications of their conclusion, that evidence for a causal association is insufficient. Do they recommend launching of the "ideal study" outlined on page 18?
What recommendation will they give to the Danish National Board of Industrial Injuries?

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests