Author's response to reviews

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

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Author's response to reviews: see over
To the Editor

Cover letter

General remarks referring to all reviewers

Reviewer 1, dated 30 November 2007
Reviewer 2, dated 7 December 2007
Reviewer 3, dated 8 January 2008

Reviewer 1 recommended that the review only included the evaluation of the association between computer work and CTS whereas the two other reviewers found the extension to repetitive low force exposures and experimental studies relevant. We think that this extension of the review is relevant and of interest to the readers. To our knowledge, this part of the literature has not been reviewed before.

We have now stated that the systematic review specifically concerns the association between computer work and CTS and that the other areas are evaluated as supplementary to the epidemiological evaluation.

Reviewer 1

General comments
1. Please refer to the above general remarks
2. We agree. The word “causal” has now been omitted several places, as recommended.
3. The Quorum statement was now followed for all relevant items (see the responses to 2a-f, 5, 8). The statement relates to meta-analyses of RCTs. Therefore not all of the items in the list could be addressed.

Specific comments
Background:
1. Please refer to the above general remarks
2. a. The results of the search are now moved to the results section and a flow chart was added (Figure 1). The literature search was rerun in order to produce the flow chart. However, the database Ergonomic Abstracts was no longer available. Originally, none of the epidemiological studies were identified only in this database.
b. There are only 2 longitudinal studies with follow up analyses of the association between computer work and CTS. In our opinion, cross sectional studies and case-referent studies in this field may be of relevance and may be better performed than longitudinal studies. Therefore, these studies were not omitted in the review but their possible bias and flaws are presented and discussed.
Studies of repetitive work and CTS are restricted to longitudinal studies, as these studies only serves as supportive evidence for an association. Therefore, a complete review of all studies of this association was not considered.
c. The outcome definition necessary for inclusion in the review is now made clear and the paragraph about choice of outcome definition is left out.
d. This paragraph is now left out.
e. We have now added a description of the quality assessment of the studies to the method section.
f. The categories are now further explained and references are added. Actually, The International Agency on Cancer Research (IARC) operates with a category where the evidence is sufficient to conclude that there is no association. This is not relevant in this context so the category is now left out, as suggested.

Results
3. The section has been shortened.
4. This particular study is now included in the text and the Table. The reason why it was not selected was that no analyses could be performed because of very few CTS cases.
5. We have placed the evidence synthesis in the discussion section.
6. Please refer to the above general remarks

Discussion
7. Please see 2e. Furthermore, an evidence synthesis has been added to the section.
8. This has now been added.

Table
9. The text in the Table has now been shortened and the study by Gerr et al. is added.

Reviewer 2
Major compulsory revisions
1. This has now been added to the introduction. The review mentioned only included two of the studies included here and not four in their evaluation of computer work.
2. This has now been added.

Minor essential revisions
1. A flow diagram and a table showing inclusion and exclusion criteria has now been added. We do not know the number of abstracts read. But all relevant abstracts were read based on the information in the title, as stated.
2. We think that exposure to typing is very similar to exposure to keyboard work. Therefore we included this as a relevant exposure. This is now clearly stated.
3. See response to reviewer 1, 2e.
4. See response to reviewer 1, 2e.
5. We have now added this to the final conclusion.

Reviewer 3
The reviewer suggests further exploration and discussion of the pathophysiological mechanisms leading to CTS. However, in the light of the general comments from reviewer 1 and the scarce epidemiological evidence of an association between computer work and CTS we don’t think this would alter the conclusion of the review. Therefore, we have not expanded this part. Furthermore, it was not possible to obtain the suggested literature as this is not accessible as peer reviewed research articles. This was one of the inclusion criteria for studies in the review.

11 Feb. 08
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