Reviewer's report

Title: Surgery is more cost-effective than splinting for carpal tunnel syndrome. Results of an economic evaluation alongside a randomized controlled trial.

Version: 1 Date: 5 May 2006

Reviewer: a h

Reviewer's report:

General
Using data from a published RCT on decompressive surgery versus splinting, the authors calculated direct and indirect costs per patient for both groups. Surgery was marginally more expensive but more effective clinically than splinting. This is a generally well written and designed paper on an important topic given the prevalence of this condition and the different treatment options on offer; there have been few cost-effectiveness studies in CTS before.

I think that this manuscript should be seen by a statistician as the main focus of paper involves economic analysis

1) Abstract and Text Background- Minor Essential Revisions
The authors say that CTS is usually treated with surgery and splinting; this needs to be changed as in practice, oral meds, steroid injections and alternative treatments are commonly used.

2) Main text background- Discretionary Revisions
There is little evidence of efficacy of most conservative treatment options is misleading as there are RCTs supporting use of oral steroids, steroid injections, ultrasound and yoga (admittedly evidence for latter two is less convincing.)

3) Main text background- Discretionary Revisions
Best approach for CTS: The authors should quote two recent RCTs that involves surgery, from Ly-Pen (Arthritis and Rheumatism, 2005) and Hui (Neurology, 2005)

4) Methods - Minor Essential Revisions
This was a retrospective analysis of the original data. Information on days off work, use of OTC medications, unpaid help, hours of inactivity etc may not necessarily be recorded at follow-up; how did the authors ensure the accuracy and reliability of these self reported data?

5) Results - Minor Essential Revisions
In the original trial, 39% of patients who had been randomised to splinting had undergone surgery would the costs of this be included in the direct costs for the splinting group?

6) Discussion- Minor Essential Revisions
The cost of open CT release is surprising low. Presumably theatre time, equipment, surgeon and nurses’ fees in the Netherlands are heavily subsidized and do not reflect the true costs. The authors should make clear, as one of the limitation of the study, is that it may not be extrapolated to other health care systems as the costs of surgery would be very different.

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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)
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