

Reviewer's report

Title: Effectiveness of physical therapy interventions for children with cerebral palsy: a systematic review

Version: 1 **Date:** 28 January 2008

Reviewer: Paul Uvebrant

Reviewer's report:

The paper Effectiveness of physical therapy interventions for children with cerebral palsy: a systematic review by Anttila et al. is important and relevant to all who are engaged in childhood disabilities.

- 1) The aim is well defined and 2) the methods appropriate and well described.
- 3) By necessity there is a subjective component in the selection and interpretation of the quality of the studies reviewed.
- 4) Data deposition and reporting are adequate (see comment about the presentation of results below)
- and 5) the discussion and conclusions are balanced and based on the findings.
- 6) The abstract and the title correspond to the content of the paper.
- 7) The writing is acceptable.

I suggest that the paper is accepted after the following minor revisions (especially item 4 below which needs to be clarified).

Background

- 1) The description of cerebral palsy includes the comment that cognitive impairments are common as well as disturbances of learning abilities. What is the distinction between the two associated dysfunctions?

Methods

- 2) Papers published after 1990 were included. When did the inclusion period end? It is stated in the abstract that it was February 2007, this should be mentioned also in Methods.
- 3) Population: participants had to be children aged three month to 20 years. There is no possibility to verify the diagnosis of cerebral palsy at three month of age. It is internationally agreed that the potential diagnosis of cerebral palsy should be verified at 4 to 5 years of age before they are accepted as cases of cerebral palsy. There are many sensational reports on cerebral palsy cured by treatment during the first year of life, children who would not have developed cerebral palsy. The authors need to describe and discuss how they and the studies reviewed have dealt with children less than four years of age.
- 4) It is stated on p 5 that trials providing other adjuncts to PT such as botulinum injection therapy were excluded, still one of the best studies reviewed, commented several times to be excellent, has the title Functional outcomes of intramuscular botulinum toxin type A and occupational therapy in the upper limbs

of children with cerebral palsy: a randomized controlled trial by Wallen et al. (ref 39). The conclusion from that study was that OT enhanced individualized functional outcomes following BTX-A injections in the upper limbs of children with CP. Should this study be excluded?? (Otherwise clarified that within this study there were subjects treated with PT and not treated with btx who were compared with no btx, no PT controls). Another question regarding this study is whether it concerns physiotherapy at all? It seems as it was occupational therapy that was used, i.e. not relevant to this review?

Results

5) The summarised results are too long and still not informative enough. The additional files are suitable for this web-based publication but an extended Table 2 in the Result section would be useful and replace some of the text. The table could include all the 22 papers analysed with additional information on the population included, number of participants, CP-type, ages, GMFCS level, ICF level on outcome measures, type of study, level of evidence, quality scores, type and duration of intervention, or at least some of this information.

Discussion

The suggestion on p 17 that for example subjective well-being should be measured, i.e. measure effects on other ICF levels than that of the intervention, may be controversial.

I declare that I have no competing interests

I suggest that the paper is accepted after minor revisions according to the attached document.