Reviewer's report

Title: Efficacy of repeated intrathecal triamcinolone acetonide application in progressive multiple sclerosis patients with spinal symptoms

Version: 1 Date: 10 September 2004

Reviewer: leo H visser

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

This study by Hellwig et al describes the efficacy of repeated intrathecal triamcinolone acetonide application in progressive multiple sclerosis with spinal symptoms. In an open study they assessed the EDSS, Barthel index and somatosensory evoked potentials in 161 hospitalized MS patients before and after treatment.

Although the results are positive, there are several concerns.

First of all in MS research it is very important to have blind assessment and preferable a placebo control arm.

I agree that it is not ethical to perform "placebo lumbar punctures", however the authors could have chosen for a strategy of 1 arm with active treatment and one arm with just follow-up without active treatment with blind assessment by an evaluating physician. A control group is now not available.

2. The treatment given; six times a lumbar puncture with TCA within three weeks is an invasive treatment. Therefore it is important to have results with underline the usefulness of this treatment.

By this study I do not believe that we have an adequate answer to this question. Although the authors mention the use of intrathecal methylprednisolone in intractable postherpetic neuralgia referring to the article of Kotani et al in the New Eng J Med 200;343:1514-1519 the correspondence after this publication raised important issues about the safety of this treatment.

3. Another point of concern is the short follow-up period after 3 weeks treatment. Is that the maximum period of follow-up? Their is a concern that the possible effect of intrathecal TCA is short (as sometimes also occurs in patients treated with intravenous methylprednisolone)

4. In the article they compare the results with immunomodulating agents in MS. I do not think the authors can make these comparisons because they did not study this. The article has to rewritten, indicating an effect of intrathecal TCA in an open labelled study, which needs to be studied further with in the discussion the limitations of the present study (no control group, not blinded, open, short-follow-up)

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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)

abstract: results section advice to mention the period of follow-up

conclusions: the conclusion is not adequate. the authors did not compare their treatment with patients with other treatments

method section: was the study retrospective or prospective

pg 5, What was the reason to stay in bed for at least six hours after intrathecal application of TCA?

in discussion: page 7 our results suggest a certain superiority and so on.. see above not investigated and can not be proven

also no comparison with intravenous administration of methylprednisolone
Discretionary Revisions (which the author can choose to ignore)
pg 7 last sentence onset of side effects advice to leave onset of away

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 limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:
none