Reviewer’s report

Title: Clinical and electrophysiological features of post-traumatic Guillain-Barré syndrome

Version: 0 Date: 13 Nov 2016

Reviewer: Kalliopi Pitarokoili

Reviewer’s report:

Comments to the author

The authors describe an interesting report, which points out another aspect of acute autoimmune neuropathy, the one beginning after a severe trauma.

Abstract

- ‘also manifested damaged cranial …’ correct to ‘…also manifested with cranial…’
- ‘and the short term prognosis was poor´ correct to ‘.. and the short term prognosis is poor …’
- I am not sure whether ‘prevent morbidity and delay mortality´ is the right goal for GBS patients. I would write prevent morbidity and mortality.

Results

- Page 8 Line 13: ‘notedshown’? Please correct
- Page 9 Line 1 I would refer to ‘reduced F wave persistence´ and not ‘incidence´
- Page 10 line 5 ‘havedescribed´ please correct
- Line 19 Page 10 ‘most physician´ most physicians
- Line 22-23 ‘also´ is mentioned two times

1. Most of the patients had a high HFGS at discharge. Was there a control CSF examination performed at the phase of clinical recovery? A stable protein on CSF would indicate an ineffective treatment.

2. Was there a prolonged hospitalisation in an intensive care unit after the ‘traumatic event (surgery etc.)´ and before the begin of GBS for these six patients?
3. The pathogenic role of most anti-ganglioside antibodies is not yet clearly recognised. Were there examinations for IgM GM1 antibodies?

4. At the conclusions you refer to short term survival. Did any of the patients die?

5. I would modify the discussion part on the pathogenetic background of post-trauma GBS in order to explain more clearly that the combination of immunosuppression after trauma, antecedent infections and genetic vulnerability may lead to autoimmune acute neuropathy in these cases.

Figures:

Figure 1:
Why were high dose corticosteroids given for patient 4, as it already known that GBS does not actually respond on them?

Why was there no plasmapheresis performed?

What was the dosage of IVIG used?

Figure 2
As the electromyography was performed 10-14 days after symptom begin (which means at the nadir for most patients), I am not sure that the conclusion regarding the axonal character of the polyneuropathy is right. For some patients with very low cMAP at this time point, it could have been an aggressive demyelinating polyneuropathy at the beginning. Prolonged F wave latencies and the reduced F-wave persistence are an indication of demyelination.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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