Reviewer's report

Title: Transient spurious intrathecal immunoglobulin synthesis in neurological patients after therapeutic apheresis

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Reviewer: Thomas Skripuletz

Reviewer's report:

The authors analyzed the effects of plasmapheresis on CSF proteins. The authors show intrathecal synthesis of immunoglobulins after apheresis as detected on Reiber diagrams. Although not surprising the results are worth to share with the scientific community.

The manuscript would benefit from some additional attention. I have only some minor points:

In results of the abstract the authors describe spurious immunoglobulin synthesis of all subclasses in 68% patients. One might suggest that all three subclasses were elevated. Please re-write the sentence.

Authors describe that LP was performed after apheresis. Was LP performed after the end of a treatment cycle or within a treatment cycle? This should be incorporated. However, I did not find.

There is some discrepancy. In the abstract the authors conclude that Ig synthesis did not occur when LP was performed two or more days after apheresis. In the conclusion of the discussion the authors write that this phenomena was found within the first two days after apheresis. In results it is stated that in one patient an elevated IgG index was found two days after apheresis.

The authors combine the effects of plasmapheresis and immunadsorption. The limitation should be discussed. Furthermore, the authors should explain both procedures and especially the difference.

The authors discuss that OCB are less susceptible to apheresis. In fact, OCB are not susceptible to such procedures.

Results: Change 45.8 years 46 years and 58.3 to 58.

Line 213-215: the two sentences can be deleted since already mentioned in the introduction.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

no to all