Reviewer's report

Title: Primary cerebral low-grade B-cell lymphoma, monoclonal immunoglobulin deposition disease, cerebral light chain deposition disease and "aggregoma": an update on classification and diagnosis.

Version: 5 Date: 29 January 2013

Reviewer: Mara Popović

Reviewer's report:

Interesting case report of otherwise extremely rare form of cerebral monoclonal immunoglobulin deposition disease (CMIDD), light chain deposition disease (LCDD) in tumoral form named aggregoma and composed of lambda light chains produced by low grade lymphoplasmocytic lymphoma. The extensive and thorough review of the literature included probably all forms of CMIDD published so far, what is of a great value. Some corrections and suggestions are included into the manuscript.

Major Compulsory Revisions:

1. The ref. 1 does not have any relevance to the topic. The authors should find another relevant reference.

2. In a case report of Cachia et al. the k-light chain immunoreactivity of the deposits was not mentioned. Beside, homogenous and electron lucent ultrastructure are not characteristics of the aggregates in LCDD, so this case should not be included into cerebral LCDD.

3. In the ref. 20 clinical history of 13 year lasting psychosis as a consequence of cerebral LCDD vasculopathy (CLCDDV) could be only a matter of speculation, but CLCDDV and related encephalopathy are, for sure, responsible for progressive bulbar palsy, which appeared 1,5 year prior to patient's death.

4. In the manuscript the authors described MRI as the lesion of basal ganglia white matter. According to the photo of MRI it is impossible to limit the lesion only to the basal ganglia white matter.

5. WSVAL and leptomeningeal amyloid angiopathy can not be named amyloidomas as authors did in Conclusion.

6. In a case report by Popović et al. (ref. 20) there is not diffuse but vascular manifestation of non-amyloid lambda light chains aggregates with consequent hypoxic encephalopathy, what is nicely described and illustrated. I would suggest to designate this cerebral LCDD presentation as Cerebral LCDD Vasculopathy (CLCDDV), as authors of the case mentioned.

Minor Essential Revisions:
1. In figure 5, I suggest the case from ref. 20 to be named CLCDDV (N=1) and to be located right to the Aggregoma (N=2).

2. Above comments and some other minor revisions are included into the manuscript, which I would like to send to the authors, if it is possible:

**Level of interest:** An article of importance in its field

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

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.