Reviewer’s report

Title: Clinical presentation and diffusion weighted MRI of acute cerebral infarction. The Bergen Stroke Study.

Version: 1 Date: 27 April 2009

Reviewer: Jens Eyding

Reviewer’s report:

Report:
Main topic of the manuscript is the correlation between radiological and clinical findings in 608 consecutive stroke patients. CT was performed in 92%, displaying acute ischemic lesions in 29% (15% LI, 85% NLI).

69% of the CT patients received MRI. 95% of these patients had DWI lesions, of which 27% were LI and 73% NLI. At the same time, patients were classified according to the OCSP score. In patients with LACS, 41% had NLI in DWI. In patients classified as PACS, 12% displayed an LI in DWI.

The main point of this manuscript is that clinical investigation represented by the OCSP does not correlate well with DWI lesions with respect to differentiation between LI and NLI. The authors admit that their results are not unique. Furthermore, the superiority of DWI to CT is mentioned, another message which is not brand-new. The implications for study trials of different kinds are obvious.

Summing-up, the considerable amount of patients undergoing MRI and the fact that previous studies are affirmed by the results justifies the acceptance of this manuscript. However, the delay of symptom onset to MRI and CT should be stated in order to better appreciate the power and drawbacks of the different methods. The discussion should be polished a bit in order to reduce abbreviations and emphasize the main points. The reader not being totally familiar with OCSP and so forth does get lost a bit in all the different terms.