Reviewer's report

Title: Increased leptin and A-FABP levels in relapsing and progressive forms of MS

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Reviewer: Irina Elovaara

Reviewer's report:

The paper by Messina and co-authors focuses on the role of leptin and A-FABP in relapsing and progressive forms of multiple sclerosis. The question is well defined and relevant, since there is relatively little knowledge in this area. According to main observation the leptin is increased in SPMS, that has been reported earlier, but increase in A-FABP is a new observation. Although the data are interesting, there are some points that need to be addressed more carefully. For example, the levels of leptins are not provided. Also the number of patients in each subgroup is missing, although it can be calculated from the figure. On page 5 it is indicated that the clinical data are on Table 1, although this table is not provided (only supplemental table 1 and 2 were attached). The paper would improve if the authors are able to provide all this information including the data on age, duration of disease in each subgroup, their EDSS, and MRI observations. It should be possible to correlate the levels of leptin and A-FABP with this clinical information that would increase the clinical relevance of their paper. The reason why RRMS patient were not treated should also be given. All this information should be easily available, since the patients were obtained from their longitudinal follow-up registry. The statistics used is not clear to me, therefore I suggest that this part will be reviewed by a statistician. Otherwise, the paper is well written and includes interesting discussion and suggestions on the role of leptins in MS.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.