Reviewer's report

Title: Weight loss, dysphagia and supplement intake in patients with amyotrophic lateral sclerosis (ALS): Impact on quality of life and therapeutic options

Version: 1 Date: 15 February 2013

Reviewer: Mamede de Carvalho

Reviewer's report:

The topic of this paper is important. The results are not very exciting. Overall, some findings are of interest and the report deserves further consideration.

The authors should consider the following comments

Major Compulsory Revisions

Methods – The influence of respiratory distress and amount of fasciculations on weight loss was evaluated, but the authors did not present any tool to quantify any of those.

It seems that FTD was not a criterion of exclusion, but less than 1% of the ALS population had FTD, which represents a clear bias. Can the authors explain this?

Significant weight loss was set at 3 Kg, which is a quite arbitrary value. In addition, it would be better to consider a percentage of the body mass index change, as 3Kg does not represent the same for everyone. I am not sure disease duration is statistically equivalent in the 4 groups; in table 1b the p values should be introduced.

Discussion – This section is too long and repetitive, the detailed discussion on the role of dementia in unnecessary. Vitality is probably related to respiratory distress; we are not sure which independent determinant of weight loss is. The discussion on dietary supplements is confusing. The many drawback of this study should be stressed by the authors.

Minor Essential Revisions

Abstract – the results section is unclear

Introduction – regarding study main aims the authors mention “to investigate the extent of weight loss in ALS and potential underlying causes beyond dysphagia”. Reading results and discussion it seems that the main were moved to correlated weight loss with clinical features and changes in QoL evaluation, as well as to test weight loss and survival. The authors should re-address the main objectives of this study.

Methods – It is important to expand the statistical section to explain the multiple regression analysis method applied. The second paragraph of Subjects and methods should be re-style.

Results – The information on the positive impact of PEG is important. On the other hand the results of weight loss on survival are based on poor statistics. The
authors should apply Kaplan-Meier survival curves and the log-rank test to verify that weigh loss is independent from bulbar-onset as determining short survival. The last paragraph of page 6 is not well written.

Table 2 is a SPSS output. The authors should present it in a more conventional way.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

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