Reviewer's report

Title: Late onset depression after stroke could be related to small vessel disease: Mood After Stroke: a cross-sectional case control study.

Version: 2 Date: 29 December 2009

Reviewer: Lara Caeiro

Reviewer's report:

This study addresses one objective: to investigate the relationship between depression and biological risk factors, in a match case control study.

The purpose of this study is quite interesting.

The authors should improve their work in several aspects:

ABSTRACT

This is a case-control study! Why did you wrote “…in a frequency matched…”? I would clarify the purpose of the study since it does not match with what you wrote in the text. For instance, you mentioned psychosocial factors, which are not in the text.

Be more accurate on the results and/or in conclusions.

METHODS

Statistical choice of Chi-square is appropriate but you should clarify that this is equal to the McNemar test, which is a form of analysis of proportions with ordinal in matched case control studies.

RESULTS

2nd paragraph: “according to DSM-IV criteria” What criteria? Give some information of these degrees of depression in the “case-control categorization”.

2nd paragraph: “prior to the interview”. Wasn’t this an exclusion criteria? It is related to the time before stroke? Please clarify the idea.

3rd paragraph: “on average two years younger”. This is not significant, so why report?

3rd paragraph: “pre-stroke mobility, continence”. It is not clear how did you assessed these

3rd paragraph: “ADL”. What is this? Activities daily living? Did you assess this? With what?

5th and “neuroimaging” paragraphs: Probably these should come together or nearby

On the 2nd paragraph of the “Neuroimaging findings”, you wrote, “index stroke scans” this is quite confusing with the “characteristics of the index stroke” writen
2 pages before. Or Are both the same? I’m not sure.

On the 2nd paragraph of the “Neuroimaging findings” you wrote at the end “, however”. Is this a mistake?

At “multivariate analysis”, at 3rd paragraph you wrote, “apart from current... dropped”. I do not get the idea! What do you what to say?

At “multivariate analysis”, at 3rd paragraph you, wrote about history of hypertension, which was transformed as blood pressure for statistical analysis. However, before on the text you wrote that history is related to a time before stroke, and that blood pressure was measured during the interview. Thus, how can they be the same?

DISCUSSION

I would open the discussion with a paragraph highlighting the most important results of the study!

2nd paragraph: “…according to DSM-IV criteria…”. What criteria? Give some information of these degrees of depression in the “case-control categorization”. Discussion is too long. Be more specific focusing on your aim.