Reviewer's report

Title: Hippocampus volume in early onset depression

Version: 1 Date: 4 December 2003

Reviewer: J. Douglas D Bremner

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General

This paper examined hippocampal volume with MRI in 17 adolescents with depression and 17 case matched controls. The authors found that hippocampal volume was smaller in patients with depression.

This is a well written study which is the first of its kind in adolescents. The imaging methods are appropriate. The use of case matching is a strength of the study.

The authors state that hippocampal volume is reduced. A more accurate statement would be that hippocampal volume is smaller, since the word reduced implies that it changed over time, which is not addressed by this study.

I would say “hippocampal volume” instead of hippocampus volume in the title.

The authors should state the mean age of the subjects in the abstract.

The authors should add another positive hippocampal volume study in depression to their literature review—Vythilingam et al, AJP, 2002.

The authors note studies have low resolution. Do they mean that the negative studies used lower resolution MRI? Please make more clear.

This study found a positive correlation between hippocampal size and duration of illness. This finding doesn't make any sense and could be spurious. Is it significant after correcting for the number of correlations performed? The attempts to come up with an explanation are strained. It can be mentioned and the need for replication emphasized, but it is placing too much emphasis to place it in the final conclusions.

Sentence “the most commonly held hypothesis…” is awkward, please re write.

The argument that cortisol is the culprit is not held up by studies not showing a correlation between volume and cortisol in depression. See a letter to the editor in AJP in 2000 or 2001 by Bremner et al.

Format error of second to last paragraph.


Discretionary Revisions (which the author can choose to ignore)
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

What next?: Accept after minor essential revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

none