Reviewer's report

Title: Association between congenital toxoplasmosis and parent-reported developmental outcomes, concerns, and impairments, in 3 year old children.

Version: 1 Date: 7 March 2005

Reviewer: Paul J Hewson

Reviewer's report:

General

The paper reports results on an important study relating congenital toxoplasmosis to a range of subsequent outcomes. The use of a cohort study to examine this condition and its consequences is of great value. However, given the variety of outcome measures studied, I think it is rather important that a clear explanation is given as to the methodology used to determine whether any particular relationship is noteworthy.

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

The Analyses section reads: Women suspected to have acquire We aimed to compare”. These features of the paper need to be tidied up.

The paper mentions that hierarchical GLMs and ordinal logistic regression were used: there is some minimal justification for the former in relation to France (was France / not-France the only upper level factor?) but I feel that some literature reference should be given which would allow readers of the paper (or their colleagues) to focus in on exactly what models are being used here. No information is given on the models used, how they were applied or how well they fit. Given the multiplicity of outcome measures and the care that is needed in that respect I feel rather more clarity needs to be provided. For example, I am left assuming how the odds ratios were derived (which may be acceptable) but this is not explained in the paper and I feel that given the importance attached to the range of outcome measures examined the multivariate aspects of the analysis need to be communicated. Another example is that no rationale is given for including potential confounders with p less than or equal to 0.2. Finally, another example surrounds the tables of odds ratios. Why should I believe that the "significance" of maternal age / motor measured outcomes is anything more than a multiple comparison type event. All I have in front of me is a table of odds ratios and a number of guesses as to how these values have been obtained based on sparse comments in the methods / results section.

Is the primary outcome of this study really parental anxiety? Of should it really be one (or more) of the markers of adverse development.

How was the sample size figure arrived at?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
To whom might the full assessment tools have been unacceptable? What evidence is there to support this statement. None is given in the paper.

How much more difficult might an assessment at school entry have been? Is it possible to estimate the possible additional losses to the study in delaying the assessment? Would it have been possible to use a full instrument / assessment tool at school entry?

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes

Declaration of competing interests:

I declare that I have no competing interests