Reviewer's report

Title: Apgar score and hospitalization for epilepsy in childhood

Version: 2 Date: 27 October 2005

Reviewer: David W Dunn

Reviewer's report:

General
1. I think the reader might better appreciate the information in this report if the author gave an explanation of what definition of epilepsy was used. It appears that the discharge diagnosis was used for the first part of the study and a more exacting definition was used for validation of the diagnosis in a subsample of 69 children. Do they define epilepsy as two or more unprovoked seizures or one seizure with pathognomonic changes on EEG? Were febrile seizures excluded?

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

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

Discretionary Revisions (which the author can choose to ignore)
1. Title, abstract, and introduction seem acceptable. The question is good. There is disagreement about the value of the Apgar score and seizures are a common problem in childhood.
2. Sample: As stated under general comments, there is a question about the meaning of "epilepsy".
3. Data analysis: Does "birth defect" refer to malformations noted at the time of birth, or to malformations discovered at any time during life?
4. Results: Are the 1079 infants with missing 5-minute Apgar any different from the remainder of the sample? Could it be that Apgar scores were more often overlooked in severely ill infants requiring resuscitation?
5. Results: The authors note that 25% of records had incorrect diagnosis. In the discussion they assume the rate of false diagnosis would not differ by Apgar score. However, is it possible that the children with a seizure but not epilepsy, asphyxia, mental retardation, unspecified neurological problems, and heart failure may have been more likely to have a lower Apgar? What were the Apgar scores for the 17 unconfirmed cases?

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests.