Reviewer’s report

Title: Risk of seizures after immunization in children with epilepsy: A risk interval analysis

Version: 0 Date: 31 Dec 2017

Reviewer: Bernd Neubauer

Reviewer’s report:

"There were 302 children with epilepsy who were eligible for the study. Immunization records were retrieved on 147 patients (49%)."

This is a low number! Why did not more parents consent? Is there a possible explanation? Were all parents contacted? Were some just unavailable?

"Children whose immunization records were available had more seizures than those without records (mean 1.7 versus 0.9, p=0.002)."

Please comment.

"We conducted a retrospective cohort study of children diagnosed with epilepsy before 7 years of age who lived in Nova Scotia, Canada and were followed by the IWK Health Centre Neurology Service between January 2010 and December 2014."

Please give numbers how many % of children with epilepsy this will cover in the given Population.

"...33% had unclassified epilepsy" This seems to be a high rate. Please comment.

"Ascertainment of healthcare encounters for seizure may have been incomplete if some telephone calls to the neurologist were not documented or if some emergency visits and admissions to hospitals outside of the IWK were not reported to the neurologist. This could have led to an underestimation of the risk of post-immunization seizure."

True! One more reason for an underestimation might be that parents might be warned by their physician or health care provider that seizures may have to be expected after immunizations. They might be prepared how to respond in such case.... Some parents therefore might find it unnecessary to report single or short seizures and handle it without phone call etc.. It would be interesting to inquire those participants who did not document a postvac. seizure by phone.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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