Reviewer's report

Title: Early Blood Glucose Profile and Neurodevelopmental Outcome at Two Years in Neonatal Hypoxic-Ischaemic Encephalopathy

Version: 1 Date: 27 October 2010

Reviewer: Denis Azzopardi

Reviewer's report:

This is a report of a retrospective study comparing blood glucose values during the first 72 hours after birth with neurodevelopmental outcome at 24 months of age, in a cohort of 55 infants with hypoxic ischaemic encephalopathy.

The authors found an association between a low blood glucose within 6 hours of birth and abnormal neurodevelopmental outcome. However although the authors stated that they performed multivariate logistic regression models it seems that only a univariate analysis was made of the relation between hypoglycaemia and outcome. The authors need to explain why a multivariate analysis including perinatal factors such as blood lactate, apgar score, severity of HIE etc was not performed. A multivariate analysis is needed to explore for an independent effect of hypoglycaemia.

Minor comments are that the last two paragraphs of the introduction need correction and that the normal/abnormal outcome groups in figure 2 need to be more clearly separated.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests.