Reviewer's report

Title: Copeptin concentration in cord blood as a marker of perinatal stress

Version: 1 Date: 7 January 2011

Reviewer: Eleftheria Hatzidaki

Reviewer's report:

1. Is the question posed by the authors well defined?
   This study aims to establish copeptin concentrations in neonates of different gestational ages and to assess the influence of sepsis, chorioamnionitis and asphyxia on copeptin concentrations.
   The authors claim in the results that copeptin concentrations correlate significantly with birth weight and gestational age. However, is there any statically significant difference in terms of birth weight and gestational age between the groups of early onset sepsis and controls, and chorioamnionitis and controls? (Minor Essential Revisions)

2. Are the methods appropriate and well described?
   The authors have to clarify the criteria for the definition of early onset sepsis. How many clinical signs have to be present? (Minor Essential Revisions)

3. Are the data sound? Yes

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes

6. Are limitations of the work clearly stated?
   Yes

7. Do the authors clearly acknowledge any work upon which they are building? both published and unpublished?
   Yes

8. Do the title and abstract accurately convey what has been found?
   The term “Perinatal Stress” in the title is not a proper one.
   In the results lines of the abstract the authors mention “Receiver-operating-characteristic curve…..allowed predicting asphyxia with accuracy…..to diagnose asphyxia…..”. I don’t understand what they mean with the term “predicting asphyxia” since copeptin concentration measurements in cord blood are routinely made after delivery. In the patients and methods section the authors define asphyxia. What do they mean with the term “diagnose
asphyxia”? (Minor Essential Revisions)

Minor Essential Revisions

1. In the background section the authors refer to the use of exogenous vasopressin as a promising therapeutic agent. Is this reference relevant to their study and their results?

2. It would be better to present results in the abstract section as well as in the main text without starting consecutive sentences with the same words “copeptin concentrations”

3. The format of the manuscript should follow the instructions for BMC Pediatrics authors (e.g. the “Patients and Methods” should be replaced by “Methods”)

4. In the “References” the authors should follow the instructions for BMC Pediatrics authors (e.g. citations in the reference list should contain all named authors, regardless of how many there are).

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.