Reviewer's report

Title: Birth and Developmental Correlates of Birth Weight

Version: 2 Date: 9 October 2012

Reviewer: Nicoletta Salerni

Reviewer's report:

The revision of the manuscript by the authors was clearer from a methodological point of view and more appropriate for clinical reflections.

However, some changes are still required to make the article suitable to publication.

Introduction

Second paragraph. “Gestational age can be classified in percentiles according to…”. I think that the authors intend that infants (and not the gestational age) can be classified according to both their birth weight and gestational age.

Last sentence. The authors state that the aim of the study was to examine how birth weights are affected by birth history and developmental milestone achievement. I think it is incorrect to hypothesize a similar direction, since birth weight is a variable that, certainly, chronologically precedes the achievement of developmental milestones. Consequently, it would be better to refer to possible associations between birth weight and the other conceptual variables.

Analyses

The SGA; AGA; and LGA categories do not refer to a classification exclusively based on gestational age but, rather, on the gestational age considered with birth weight. So, the label “Gestational Age Classification” is not appropriate and it must to be change throughout the text and tables.

The authors state that to test whether parent’s responses differed according to their children’s age at evaluation, they calculated Pearson’s correlation between birth weight and children’s age at evaluation. However, birth weight is not the only retrospective variable, so it should be specified that the same analysis was also conducted with the other measures taken into consideration.

Results

Developmental Milestones

Second paragraph. The authors claimed that “Larger birth weights for HBW children were correlated with earlier independent sitting”, but the correlation value is positive; this information is therefore inconsistent.

Moreover, the n value given for the next correlation calculated between birth weight category and eating solids does not refer to the NBW infants but to those classified as LBW (see Table 4A)
Note that the item “drinking from a cup” (see Table 1) does not appear in the analyses concerning developmental milestones; the authors should explain why.

Regression analysis
As already suggested regarding to the purpose of the study, it is theoretically incorrect to use the term predictors of birth weight if the predictors considered refer to variables measured at a later time.
Moreover, the predictor parameters “birth weight categories” and “gestational age classification” include the same variable that must be predicted (birth weight). This artifice makes the statistical analyses unnecessary.

Tables 4A and 4B
Titles of the tables must be changed by also referring to the Onset Age

**Level of interest:** An article of limited interest

**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 that I have no competing interests