Reviewer’s report

Title: An Adjustable Fetal Weight Standard for Twins: a statistical modeling study

Version: 2 Date: 10 April 2015

Reviewer: Adolfo Liao

Reviewer’s report:

This study describes an adjustable fetal weight standard mathematical model for twin pregnancies based on ultrasound derived fetal growth standard (Hadlock, 1981) and the proportionality principle.

Major Compulsory Revisions

Abstract

Results section: the following text “The discrepancy was probably due to errors in gestational age in these studies.” is not properly a result of the study, it is more suitable in the “discussion” section.

Methods

Several studies have described that growth pattern is similar between singleton and twin pregnancies up to the end of the second trimester. However fetal growth seems to decelerate afterwards. Is it valid to apply the proportionality principle on a formula which is based on ultrasound derived singleton pregnancies? Hadlock’s formula describes growth pattern in singleton pregnancies and does not take into consideration the deceleration that occurs in twin pregnancies in the third trimester.

Results

Figure 1 compares observed and adjusted fetal weight standards for the US Data Base. Why did the authors not present and compare the upper (90th centile) and lower (10th centile) limits observed and adjusted curves in this figure?

Discussion

Can the authors hypothesize the reason why the 90th centile observed in the Brazilian longitudinal data was greater than what was predicted in the model? I believe one would expect the standard deviation to be narrower in longitudinally derived data.

Minor Essential Revisions

The text should be reviewed for several typo mistakes. Essentially the are spaces missing between words. Examples in page 5: “twin births at term. However”, “Hadlock’s curve” “percentiles can be calculated A complete fetal weight standard”.

Quality of written English: Acceptable

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