Reviewer's report

Title: Adverse maternal outcome of fetal macrosomia. What risk factors beyond birthweight?

Version: 1 Date: 17 February 2013

Reviewer: Ihab Usta

Reviewer's report:

The objectives of the study are clearly defined. The methods are appropriate and well described. The results reached are consistent with other studies in the literature.

Data is appropriately collected and reported. The conclusions are well balanced and adequately supported by the data. Limitations of the study are not adequately addressed. The literature review is appropriate. The title is better changed to "What are the risk factors beyond birthweight?"

Although the approach of this study is new, however, the risk factors identified were commonly reported in the literature and the risk factors could stand out on their own when mutivariate analysis was utilized including birthweight. What is important in this study is the big number of macrosomic infants included.

I have the following comments that require discretionary revisions:

- Prolonged labor was defined as >10 hours, is there a reference to support this definition?

- Factors that affect the incidence of lacerations or bleeding like parity, episiotomy, fetal position, instrumental delivery and the use of epidural were not included in the multivariate analysis.

- Since the combined attributable risks constitute around 42% of attributable risk, it is worth commenting that most of the cases of MC are not associated with identifiable risk factors.

- It is mentioned that labor was induced for postdates in 60% and for maternal fetal complications in 30%, were the rest for social indications?

- The rate of CS in labor is 17% which appears quite low even in non-macrosomic infants. What is the rate of CS in the hospitals included in the study?

- In table 1, mean and range is mentioned; usually median-range

Minor Essential Revisions

Abstract

Background

"To identify risk factors, beyond fetal weight, associated with adverse maternal outcome in delivering infants with a birthweight of 4000g or greater and to quantify their role in maternal complications". Long sentence, need to split into two statements.
Methods

“All women (n=1564) with … has been included” replace has with have

Results: Need to lump risk factors that increase the risk of maternal complications together (i.e. before previous macrosomia)

Conclusions: Can change to: “In women delivering infants with a birthweight of 4000g or greater, some maternal characteristics as well as labor parameters may worsen maternal outcome beyond the influence of increased fetal weight”

Background:

“adverse neonatal outcome including stillbirth, neonatal mortality” add “and” before neonatal mortality

“with and without newborn over 4000 g” change to newborns

“to other risk factors than fetal weight” change to risk factors other than fetal weight

“occur in women delivering macrosomic infant” add s to infant

“risks factors of maternal complications” change of to for

“who delivered macrosomic infant” add s to infants

Methods

“A systematic adjustment was made for hospital centre,” Delete ,

“In the one hand, they may prevent maternal complications (in particular perineal lacerations), in the other hand” replace in with on – “on the one hand” and “on the other hand”

“one with the same composite criteria for MC, the other including elective cesarean delivery for

macrosomic suspicion as a supplementary criteria for MC.” Replace one with the first and the other with the second

Table 1. 696 (44,.5), delete ,

Gestational diabetes under diet-change to diet-controlled gestational diabetes

3rd or 4th degree perineal tears§; § is not explained

(1564 women with singleton pregnancies who attempted a vaginal birth and delivered infants weighing at least 4000 g, elective cesarean excluded)-no need to include in table

“cesarean during labor and birth weight greater than 4,5 kg” change to grams to be consistent

Discussion

“women with an history” replace an with a

“Over those two steps, complications are dramatically increased. The 4500 g threshold was always present in our study, but to a lesser extend since the sample was limited to newborns heavier than 4000 g.” replace steps with
thresholds and extend to extent
“results potentially generalizable” add that are potentially…..
“These singularities in body tissue” replace singularities with particularities
“more prone to returned for a uneventful second delivery.” Unclear, can change to “are more likely to experience an uneventful second delivery”
The whole paragraph starting with maternal diabetes has to be modified.
[30, 31] missing period
Change main “provider” to main “contributor”
Agreement with literature, add the
“the magnitude of the proportion of MC that could be avoid in removing the risk factor” changed avoid to avoided
“for factors that may be removed, but to a lesser extend for unchangeable factors such as ethnic origin.” Replace removed with modified and change extend to extent
“Estimation of attributable risks enabled us to precise that only 10% of MC” change precise to precisely identify
“identical to prolonged labor” change to identical to the contribution of prolonged labor
Conclusion
“Obstetricians should pay attention to these parameters that could led” change to should be aware to these parameters that could lead”

**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, and I have assessed the statistics in my report.

**Declaration of competing interests:**
'I declare that I have no competing interests'