Reviewer’s report

Title: The effect of twin-to-twin delivery time intervals on neonatal outcome for second twins

Version: 0 Date: 09 Jun 2017

Reviewer: Eran Barzilay

Reviewer's report:

This study examined the association between perinatal outcome of the second twin and twin to twin time interval. In accordance to previous studies, they have found that long interval is associated with poor perinatal outcome.

1. The authors should explain from the beginning of the manuscript is that the study was conducted in a medical center where active management of the second twin delivery is not routinely practiced. The authors comment on this in the discussion section, however, it should also be mentioned in the introduction section to allow the reader to put the data in the proper context.

2. The protocol for twin delivery should be more clearly defined in the methods section. For example, from table 1 we can conclude that even in cases of breech presentation the preferred mode of delivery for the second twin was spontaneous breech delivery and not breech extraction - this was not clear from the delivery protocol as written in the methods section.

3. In the discussion section the authors agree that although active management of the second twin delivery is considered the preferred management according to current literature and that they do not practice IPV routinely due to lack of experience. Nevertheless, lack of experience does not explain the fact that their protocol prefferes spontaneous breech delivery to breech extraction in cases of breech presentation and the fact that after delivery of the first twin oxytocin is stopped.

4. Author should also discuss external cephalic version vs IPV since some studies found that external cephalic version is associated with lower success rate (for example - Gocke et al. Am J Obstet Gynecol 161(1): 111-114.)

5. The definition of primary outcome is somewhat confusing. Is an Apgar of <4 considered as poor outcome only if no pH data is available or even if pH is > 7.05?

6. Regarding logistic regression the authors report relative risk. Since logistic regression output is odds ratio the authors need to elaborate on the conversion of OR to RR.

7. Cases that culminated in a CS for the second twin may be a source of bias, since preparation and anesthesia may cause a delay in delivery time, especially if twin delivery
is not routinely preformed in the operating room. I would suggest analyzing the data stratified to vaginal vs CS of the second twin to address this possible bias.
8. Ethical approval is not mentioned in the methods

Minor comments:

1. In the abstract the authors report the median interval as 19 min (2-399). Please add whether this is range or IQR (I presume range).
2. Last row in table 2 - the rate of first twin larger than second twin is stated as 16 (59%). Since the n was 527, this appears to be an error - correct or clarify.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
**Declaration of competing interests**

Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license ([http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal