Reviewer’s report

Title: Prenatal exposure to antifungal medication may change anogenital distance in male offspring: A preliminary study

Version: 0 Date: 12 Feb 2017

Reviewer: Ajay Thankamony

Reviewer’s report:

The authors explored the relationship between prenatal exposure to antifungal agents used for vaginal candidiasis and the Anogenital distance (AGD) at 3-month-old boys. They found that prenatal exposure to oral antifungals are associated with significantly lower AGDas in 4 boys. Trends in the same direction were seen in 20 boys exposed to vaginal tablets.

The report is from a large population based cohort. The manuscript is well written and the data well presented. These findings are interesting as it supports the data from animal experiments and will prompt further research in the area.

However, the major drawback as highlighted by the authors is that significant findings are based on 4 boys exposed antenatally, the trend in those exposed to vaginal tablets is also support their findings. One of the major confounding factor in similar studies is body size and the authors have adjusted their findings. Also, the raw data provided in supplementary table which provide birth weight also is reassuring that this is not a major issue. There are some issues such as these trends are not seen in the 10 boys exposed to both tablets and cream, the lack of similar trends in AGDap, and a huge variation in the data (Appendix table 1-one child with a measurement of 17.2 mm, compared to a mean of 35.0). These needs to be addressed.

Level of interest

Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English

Please indicate the quality of language in the manuscript:

Acceptable

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.

None

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/). 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