Reviewer’s report

Title: beta-hCG changes during spontaneous resolution in tubal ectopic pregnancies

Version: 1 Date: 21 February 2015

Reviewer: Nadia Jahangiri

Reviewer’s report:

Dear Sir/Madam

Manuscript entitled “beta-hCG changes during spontaneous resolution in tubal ectopic pregnancies” has been reviewed and following are my comments:

Title:

The title is not compatible with study’s design. The authors have not evaluated beta-hCG changes, they have defined the length of time required for beta-hCG to drop below 5 iu/L.

Abstract:

1- IU/L should be inserted instead of iu/L in the abstract and all other parts of the text.
2- The conclusion in the abstract should be written according to the conclusion section of the article.

Introduction:

1- Line # 65: references should be cited for the sentence “Previous studies have focused on assessment of beta-hCG clearance curves in women following treatment with methotrexate or after salpingotomy”
2- Line # 69: A reference should be cited for the sentence “A novel medical management strategy with the chemotherapeutic agent gefitinib has been recently proposed with the main aim of shortening the beta-hCG clearance time.”

Materials & methods:

1- I think this study is a retrospective longitudinal study, not retrospective cohort study.
2- There is no definition for the variable “beta-hCG trend” in method section.

Results:

Some parts of result section are unclear and the text needs to be polished.

1. In Statistical analysis it is mentioned that authors used linear regression to assess predictive variables’ independence. It should be reported clearly.
2. Line # 168: It is mentioned “The linear regression model retained both beta-hCGmax and beta-hCGtrend as independent predictors of the length of follow up.”
The variables which have been included in the model should be reported. It is not clear.

3. There is no information about the patient’s gestational age.

4. Line # 143: The authors says “The final study group included 158 out 226 women”. What happened for the rest of the samples (n=68). Reasons for non-participants should be included.

5. Use of flow diagram should be considered.

6. There is no data about variable “#-hCG tres” in results, which has been defined in method section.

7. It is better to include the overall success rate and complication rate of expectant management.

8. The label of table 1 is not compatible with the table itself. It should be improved.

9. Vertical lines should not be used to separate columns in table 1.

Discussion:

1. In line # 175, it is mentioned “the median interval for b-hCG to return to pre-pregnancy levels is 20 days” while in abstract it is mentioned “18.0 days”

2. Line # 211: A reference should be cited for the sentence “because the measured diameter reflect varying degrees of oedema and hematosalpinx and so do not correlate closely with the amount of active trophoblastic tissue”

3. Line # 202: by must be inserted instead of hy

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests