

## Review Form 1.6

Journal Name:	<a href="#">Journal of Pharmaceutical Research International</a>
Manuscript Number:	Ms_JPRI_76896
Title of the Manuscript:	Pharmaceutical Effects on Placental Morphology in Women with Gestational Diabetes Mellitus
Type of the Article	Original Research Article

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://peerreviewcentral.com/page/manuscript-withdrawal-policy>)

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**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>Classification of GDM not consistent with to WHO guidelines. Author mentioned &gt;140 mg/dL in the abstract and in the methodology GDM was diagnosed using a glucometer and rechecked with lab data using WHO standards (FBS &gt; 110mg/dl and RBS &gt; 130mg/dl). Diagnostic Criteria is conflicting and not clearly defined but according to WHO, it is recommended that GDM be diagnosed if one or more of the following criteria are met: fasting plasma glucose (FPG) 5.1–6.9 mmol/L,(92-124 mg/dL) 1-h plasma glucose (PG) ≥ 10.0 mmol/L (≥180 mg/dL ) or 2-h PG 8.5–11.0 mmol/L (153-198 mg/dL) hr plasma glucose levels after overnight OGTT fast, whilst those with FPG ≥ 7.0 mmol/L or 2-h PG ≥ 11.1 mmol/L are diagnosed with diabetes in pregnancy [6].21 Mar 2018</p> <p>The criteria classification of GDM should be very clear and based on WHO recommendations for the results of the study to be justified. The 140 mg/dL used in the study is not according to WHO recommendations as it is not clearly stated if its random or fasting blood glucose levels</p> <p>Title should read : <b>Effects of Metformin and diet on Placental Morphology in Women with Gestational Diabetes Mellitus</b>                      The importance or effects of the diet on placental morphology and on blood glucose results whether fasting or random was not adequately addressed and so was the effect of 30-minute walk three times a week between Set B and set C. Was this diet maintained or discontinued during patient preparation for FBG and OGTT There is also need for proper definition of sets B and C in terms of their fasting plasma glucose levels as a definition criteria for GDM. Please clarify the highlighted part in that respect, <b>Against who standards, 35 patients of GDM through blood sugar levels 140 mg/dl?? remained allocated Set B (2500-3000Kcal/day and 30-minute walk three times a week). They remained reserved on diet control, while 34 patients of GDM through blood sugar levels &gt;140 mg/dl?? have been delegated Set C and remained reserved on diet with tablet Metformin (550mg TDS).</b> There is also need for clarity on the diet constituents, ie, carbohydrate, protein and fat content. When a patient is prepared for OGTT there is need to maintain them on a constant carbohydrate diet 3 days prior to the test, ie patient must be on unrestricted diet containing at least 150g of carbohydrate for 3 days before test.                      Is this the diet that was maintained just before the test or patients in Sets C and B continued on the 2500-300 Kcal/day? Also what was the figure on the diet based on, ie what is its significance. Where Set B and C patients on the same diet so as to make an informed decision on the effect of diet. In the methodology it seems these two sets of patients were on different diets in terms of calories let alone the constituents of the diet which were never mentioned. This makes it difficult to assess the effect of diet in these sets of patients.</p> <p>In the methodology its mentioned that” They have been encouraged to consume only 2800 calories per day, through food charts provided and 32 minutes of walking three times each week. Who is they? Be specific? Methodology not clear when referring to the different sets. Information is not clear and concise and there is a lot of mix up.                      Also the numbers of GDM participants not tallying (66 mentioned in abstract and 65 in method section) were enrolled but 35 in Set B and 34 in Set C making a total of 69 versus 66. Control group (Set A) also needs to be properly defined. Numbers of patients in the Control group also conflicting in the method section it is (29) and in the abstract it is (28)</p>	
<b>Minor</b> REVISION comments	<p>How often and how were the patients on metformin monitored, methodology is not clear on this? This can be dangerous to the well-being of patients if not carefully monitored given that the drug dosage was increased without proper monitoring of blood glucose levels. Also we need to know for how long the patients were on this drug and at what point during pregnancy the administration was started.                      Why a P value of 0.06? What was your P value for significance? IT'S NOT CLEAR WHETHER IT'S 0.05 or 0.001. It is all mixed up. Please explain the meaning of low cell count as the reason for using Fisher exact test instead of Chi test.                      “Overall, 3 groups' findings (normal control, GDM on diet therapy, and GDM on metformin therapy) remained statistically <b>meaningless</b>”, do you mean insignificant?                      HBA1c starts appearing in results section but was not mentioned in the methodology section so we don't know how the analysis was done. It also not clear or not discussed as what effect the diet had on the placenta or on the blood plasma levels</p>	
<b>Optional/General</b> comments	<p>More Literature review needed to show findings of other researchers who did similar studies. Referencing poorly done, I see just a few of the references appearing in the text. Study lacking in depth because of inadequate literature review as evidenced by the few references. In the introduction all the information is not referenced. Does this mean that the information is generated by the author?</p> <p>Methodology not clear, and lacking in recruitment strategy, no basis for sample size justification and basis for using the stated number. The</p>	

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	<p>methodology section is lacking some methods and data collection procedures, Not clear on use of questionnaires, and use of laboratory generated data in terms of blood test results to back up the histology findings.</p> <p>Results section needs to be more concise. For how long were Set C patients on metformin? I.e the time from onset of enrolment to 36 weeks gestation</p> <p>Discussion section is inadequate. There is need to discuss the findings in comparison to other researchers' findings on similar work. The conclusion is not clearly supporting the finding of the study and is rather vague. "In Metformin-treated placentas had morphology comparable to traditional control placentas" Was the drug used to treat the placentas?</p> <p>It would also be interesting to know if any of the "healthy 28 healthy pregnant women in Set A as controls" developed GDM by the time of delivery.</p> <p>Generally there is lack of detail especially in the literature review, methodology and results section to generate a sound discussion of the findings. There is also need to improve on the grammar.</p> <p>The concept of the study is noble but it needs a lot of polishing up to make it a much study. GDM is becoming a major health problem in pregnant women, so research in this area is very important for the well-being of women and their unborn children. Thus Study is scientifically sound and significant.</p>		
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**PART 2:**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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