



SDI Review Form 1.6

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	2014_IJBcRR_10138
Title of the Manuscript:	Oxidative DNA damage in gestational diabetes mellitus: Correlation with antioxidants in an Iraqi cohort
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:

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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)
Compulsory REVISION comments	In order to improve the quality of the manuscript, I would like offer the following suggestions Abstract 1. Please rewrite the aims. The aims should be written as "This study aimed to evaluate....." 2. The methodology should also briefly explain the study groups, sample collection and method of analysis. 3. Please write $P = 0.05$ rather than $P = .05$	Thank you very much for your kind suggestions: The aim have been amended to be: "This study aimed to evaluate the degree of oxidative stress in gestational diabetes mellitus when compared to non-diabetic pregnant women" The methodology section has been amended as follow: "This cross-sectional study included 73 participants (29 gestational diabetic women and 44 control pregnant women) attending the Maternal and Childhood Unit, Al-Husayniya Medical Centre, Baghdad, Iraq. Suitable candidates were invited to participate in the study and were given details about the study plan and aims. Participants were asked to fill and sign the consent form before they can be included in the study. The data was analyzed using SPSS (Version 14) and Microsoft Excel (Office2007, Microsoft). All values were expressed as mean $\pm$ standard deviation ($M \pm SD$)." In fact I believe that the use of $P=0.05$ more accurate, however when I looked on the authors guidelines http://www.sciencedomain.org/page.php?id=general-



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	Introduction Line number 60-64, page 3. “The current study aims to measure the markers of oxidative stress (as expressed by the level of 61 serum MDA and serum 8-OHdG) and correlate their levels with the antioxidants (as expressed by the 62 level of plasma reduced GSH) in an Iraqi cohort of women whom diagnosed with GDM. This study also aims to compare the extent of oxidative damage present in GDM women compared to non64 gestational diabetic women by measuring 8-OHdG levels, lipids, serum MDA and plasma GSH.” Methodology 1. The age of gestation at the time of blood taking was not mentioned in the methodology. 2. The results mentioned about the total cholesterol and LDL-cholesterol levels but not in the methodology. 3. $p < 0.05$ should be written as $P < 0.05$.	guideline-for-authors, the Guideline for Reporting P values: says that and I quote “Correct expression: ($P = .05$). Wrong Expression: ($P < .05$), unless $P < .001$”. Accordingly, I have amended all P values to fit with what is required. Please let me know if I am wrong so I can redo all these changes into what you are suggesting. Thank you, I have amended this section to be: “The current study aims to measure the markers of oxidative stress (as expressed by the level of serum MDA and serum 8-OHdG) and correlate their levels with the antioxidants (as expressed by the level of plasma reduced GSH) in an Iraqi cohort of women whom diagnosed with GDM. This study also aims to compare the extent of oxidative damage present in GDM women compared to non-gestational diabetic women by measuring 8-OHdG levels, lipids, serum MDA and plasma GSH”. The age of the gestation at time of blood collection is mentioned in table1. I have highlighted this in table 1 as follow: “Gestational Weeks at time of blood collection 24.5 ± 3.8 23.3 ± 2.4”. I have added the method of measuring serum lipids to the methodology section: “Measurement of serum lipids: Serum lipids were measured using ELISA Kits from BioMerieux, France”. As i mentioned above, please note that this way of writing
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	Results 1. Please write $P = 0.05$ and $P < 0.001$ rather than $P = .05$ and $.001$ 2. Discussion 1. This study did not show the efficacy of using emerging biomarkers as a multi-marker approach to characterize GDM in the first trimester of pregnancy as the measurements were made at second trimester. The authors should do the measurement earlier i.e. when other established blood parameters e.g. fasting blood glucose could not detect the abnormalities. 2. The increased in 8-OHdG combined with increased MDA and a decrease in GSH does not provide any unique picture of the health state of the patient and cannot be used as an indicator for individualized treatment. The authors should do correlate between oxidative markers and more established markers used to monitor GDM e.g. HBA1c etc.	the P value is based on the guidelines provided by the ScienceDomain http://www.sciencedomain.org/page.php?id=general-guideline-for-authors. Please correct me if I am wrong so I can redo all these changes concerning the P value. As Above discussion Thank you for this, I have amended the first section of the discussion to be: “This research has demonstrated the efficacy of using emerging biomarkers as a multi-marker approach to characterize GDM during pregnancy.”. In addition, our next target is to start measuring these markers in females during the first trimester and follow up them during the remaining of the pregnancy to identify how these markers behave. We have excluded participants with complications from other disease to prevent any confounding results. Also, we have already monitored the behaviour of these markers with HbA1c. however the changes in HbA1c is much less (take longer time to change) compared to the more acute changes in these markers and this is what we are trying to provide. An easy to measure but accurate marker/s that can changes within short period of time to reflect the instant changes in body metabolism which is reflected by changes in the oxidative stress/antioxidants level.
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	Conclusion The study only demonstrated the correlation findings at second trimester and it is not fair to over conclude.	We agree with the reviewer comment in this regards and I have amended the conclusion to be as follow: “Our study showed that measuring the biomarkers of oxidative stress (as expressed by serum MDA and serum 8-OHdG) and antioxidants (as expressed by plasma GSH) is an important step in monitoring the disease progression at second trimester. Further studies are required to monitor the behavior of these markers during the whole pregnancy aiming to help monitor disease progression and reduce the risk of hyperglycemia-associated pathology on pregnant women and their fetuses”.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		