



SDI Review Form 1.6

PART 1:

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| Journal Name: | British Journal of Medicine and Medical Research |
| Manuscript Number: | MS: 2012 BJMMR 2821 |
| Title of the Manuscript: | Changes in Some Testicular Biometric Parameters and Testicular Function in Cadmium Chloride Administered Wistar Rats |

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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) |
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| Compulsory REVISION comments | <p>The authors showed that the exposure of rat to cadmium chloride induces the changes in testicular biometric parameters, including kidney weight and volume, and testicular functions, including sperm count, morphology and serum testosterone level. They also concluded that these changes in the testicular biometric parameters and testicular functions are positively correlated. However, the manuscript presents some issues that should be carefully revised.</p> <p>1. The exposure level of environmental pollutants is important for considering the cadmium poisoning. How did authors selected the cadmium chloride dose in this study? The reason for it is necessary.</p> <p>2. In addition, the author should show cadmium concentrations in the testis and the relationship between the cadmium concentration and testicular biometric parameters. The study of cadmium concentration in the testis will help to understand the mechanism of cadmium-induced testicular damages.</p> <p>3. It is well known that cadmium cause testicular damages in animal model. Various studies have also demonstrated that cadmium causes disruption of the vascular system in the testis and blood-testis barrier. Were testicular damages, such as testicular hemorrhages and histopathological changes observed in this study?</p> | <p>1) The choice of the separate doses of Cadmium chloride is based on the fact that Mervat (2011), and we followed the various specifications in his study in preparing a cadmium chloride solution. The various concentration prepared caused graded inhibition of testicular function of Wistar rats, testicular functions such as sperm count, sperm motility, sperm morphology and testosterone.</p> <p>2) and 3). The study was specifically on the effect of cadmium chloride on some testicular biometric parameters such as the testicular weight and volume, and if these changes could be related to infertility. Though the use of histopathological sections were outside the scope of this study, the reductions in testicular volume and weight would suggest that there is an effect on testicular architecture. Hence we would suggest subsequent study to be carried out in that area involving histology of the testis and the effect due to cadmium chloride poisoning.</p> |



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| <u>Minor</u> REVISION comments | <p>1. The authors analyzed their data using by Student t-test. I recommended that the statistical analysis should be performed using a one-way ANOVA and a post-hoc test.</p> <p>2. There are not few references, for example, Page 1, line No. 33, Waisberg et al. (2003); Page 2, line No. 40, Benoff et al. (2000); Page 7, line No.149, Redkha et al. (2011).</p> | <p>1. Our choice of student t-test for statistical analysis was due to the fact that we decided to compare the control group with each of the various experimental groups.</p> |
| <u>Optional/General</u> comments | | |