



SDI Review Form 1.6

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| Journal Name: | Journal of Advances in Medicine and Medical Research |
| Manuscript Number: | Ms_JAMMR_41277 |
| Title of the Manuscript: | QT interval variability in patients with obstructive sleep apnea |
| Type of the Article | Opinion 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://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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) |
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| <p>Compulsory REVISION comments</p> | <p>Did the authors measure corrected QT (Qt_c) interval as well? QT_c is a better marker than QT interval. QT corrected interval dispersion (QT_{cd}) is considered a great marker QT variability assessment, aside from QT_{VI}. If data not available add as a limitation of the study. Compare why your results could be different from that noted by other authors who found increased QT interval variability in OSA. (See below).</p> <p>You correctly pointed out that QT_{VI} is increased in epochs capturing sleep apnea. Only one hour of sleep between 3-4 Am was used for capturing QT_{VI}. Most of slow wave sleep that is protective against sleep apnea happens in first third of the night. Most of REM sleep happens in later half of the night. This early morning sleep hour is a period of REM sleep.</p> <p>Did the authors collect data what the mean AHI was for that hour of recorded QT_{VI}. This will help understand whether patients were in NREM or REM sleep because apnea/hypopneas can affect QT_{VI}. If not collected mention as a limitation of the study.</p> <p>REM sleep duration and REM density could affect both AHI and arrhythmic activity. Initial CPAP use can create a REM rebound and help alleviate QT_{cd}. (see citation below).</p> <p>I recommend including following pertinent citations to include the strength of the manuscript.</p> <p>Obstructive sleep apnea is associated with increased QT corrected interval dispersion: the effects of continuous positive airway pressure N Bilal, N Dikmen, F Bozkus, A Sungur, S Sarica</p> <p>Rapid Eye Movement (REM) rebound on initial exposure to CPAP therapy: a systematic review and meta-analysis G Nigam, M Camacho, M Riaz</p> <p>QT interval variability index and QT interval duration in different sleep stages: analysis of polysomnographic recordings in nonapneic male patients M Viigimae, D Karai, P Pirn, K Pilt, K Meigas</p> | |
| <p>Minor REVISION comments</p> | <p>None</p> | |



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| Optional/General comments | Well written manuscript. Need to explain why study results could be different from other study (sample size, sleep study sampling time selection bias) etc. Recommend adding more citations. | |
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Reviewer Details:

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| Name: | <i>Gaurav Nigam</i> |
| Department, University & Country | <i>Clay County Hospital, USA</i> |