

Review Form 1.6

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_78093
Title of the Manuscript:	Quantification of Caspase 3 levels in patients with periodontitis with or without Diabetes Mellitus
Type of the Article	Original 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	<p>1) Abstract. Results: From this study, it was observed that there was a significant increase of caspase 3 levels in periodontitis patients with diabetes mellitus (86.29±24.25 pmol/L) when compared to periodontitis patients without diabetes (55.06±12.90 pmol/L). The results showed a positive correlation and high level of significance when compared between periodontally healthy patients and periodontitis patients along with diabetes mellitus (86.29±24.25 pmol/L). Also, relatively significant results were observed in comparison between periodontally healthy patients (43.37±15.35 pmol/L) and patients with periodontitis without diabetes mellitus (55.06±12.90 pmol/L). Please add the most important statistical values.</p> <p>2) Introduction. Despite recent progress in scientific research, a great deal is still unknown about apoptosis [22,23]. Our team has extensive knowledge and research experience that has translated into high quality publications [24–36],[37–41] [42] [43]. Therefore, elucidating the mechanism of apoptosis in response to high glucose is essential in order to better understand the etiopathogenesis and pathophysiology of high glucose induced periodontitis and to develop novel medical treatments against this debilitating condition. to establish a significant relationship between increased glucose levels and periodontal fibroblast apoptosis. Hence the aim of the study is to compare the caspase 3 levels in periodontitis patients with or without diabetes mellitus. Please ameliorate.</p> <p>3) STATISTICAL ANALYSIS: The triplicate analysis results of the experiments performed on control and treated rats were expressed as mean ± standard deviation. Results were analyzed statistically by a one-way analysis of variance (ANOVA) and significant differences between the mean values were measured using Newman-Keuls multiple comparison test using Graph Pad Prism version 5. The results with the p < 0.05 level were considered to be statistically significant. Please improve</p> <p>4) Table 1: Comparison of salivary caspase-3 levels among 3 groups, periodontal health, periodontitis (P) and periodontitis with diabetes mellitus (P+DM). The values are expressed in pmol/L. The levels of salivary caspase-3 were assessed by the Enzyme Linked Immunosorbent Assay (ELISA) method. Significance at p <0.05. Please improve.</p> <p>4) 4. CONCLUSION The present study showed that caspase-3 concentrations in saliva are higher in patients with periodontitis along with diabetes mellitus when compared with periodontal disease only. Thus diabetes mellitus have an impact causing increased periodontal destruction. Therefore, caspase-3 plays a role as a biomarker of periodontal disease in diabetes mellitus and its progression. This section must be improve</p>	
Minor REVISION comments	None	
Optional/General comments	None	

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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
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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