

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Clinical Cases*

**Manuscript NO:** 76281

**Title:** Comparative study of surface electromyography of masticatory muscles in patients with different types of bruxism

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 06263941

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** Bulgaria

**Author's Country/Territory:** China

**Manuscript submission date:** 2022-03-10

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-03-10 12:32

**Reviewer performed review:** 2022-03-18 18:05

**Review time:** 8 Days and 5 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="radio"/> ] Anonymous [ <input type="radio"/> ] Onymous
	Conflicts-of-Interest: [ <input type="radio"/> ] Yes [ <input checked="" type="radio"/> ] No

## SPECIFIC COMMENTS TO AUTHORS

1. The abstract is too voluminous - 399 words. Please reduce it to 250 words! 2. Bruxism is a widespread parafunction that few dentists know how to treat properly. The article includes important information about muscle activity and opens the door to treatment by influencing it. I would recommend the authors to enrich their literature with other ways of research: 1. Shopova, D., Bozhkova, T., Yordanova, S., & Yordanova, M. (2021). Case Report: Digital analysis of occlusion with T-Scan Novus in occlusal splint treatment for a patient with bruxism. F1000Research, 10. 2. Taneva, I., Uzunov, T., & Milanov, N. Complete digital approach for bruxism management. 3. Kosturkov, D., Taneva, I., & Uzunov, T. Examination of pulp innervation of teeth with abrasion. 4. Bozhkova, T., & Shopova, D. (2021). T-Scan Novus System in the Management of Splints – Pilot Study. European Journal of Dentistry. 5. Pita, M. S., Ribeiro, A. B., Garcia, A. R., Pedrazzi, V., & Zuim, P. R. J. (2011). Effect of occlusal splint thickness on electrical masticatory muscle activity during rest and clenching. Brazilian oral research, 25 (6), 506-511. 3. Well described and structured methodology! 4. Well described and illustrated results! 5. Quite a voluminous and detailed part of the discussion!

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Clinical Cases*

**Manuscript NO:** 76281

**Title:** Comparative study of surface electromyography of masticatory muscles in patients with different types of bruxism

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 04279936

**Position:** Associate Editor

**Academic degree:** PhD

**Professional title:** Academic Research, Professor

**Reviewer's Country/Territory:** France

**Author's Country/Territory:** China

**Manuscript submission date:** 2022-03-10

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-03-29 13:00

**Reviewer performed review:** 2022-04-02 07:36

**Review time:** 3 Days and 18 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="radio"/> ] Anonymous [ <input type="radio"/> ] Onymous Conflicts-of-Interest: [ <input type="radio"/> ] Yes [ <input checked="" type="radio"/> ] No
-------------------------------------	---

## SPECIFIC COMMENTS TO AUTHORS

The authors define the bruxism motion as a rhythmic masticatory muscle activity that occurs involuntarily in a non-physiologically functional state. They hypothesized that there are differences in the types of muscle affected by different kinds of this special motion. The authors try to determine whether there are differences in the muscles involved in bruxism in patients with different types of mandibular movements by analyzing the characteristics of TA and MM contraction sEMG signals in different mandibular positions and chewing activities. They provided a physiological basis for the diagnostic classification and the selection of appropriate treatment options for bruxism patients with different types of mandibular movements. The document is well written and structured. The given background in the Introduction is easy to follow and cites the recent appropriate papers. It provides a hypothesis or aim of the study well located in relation to the state of the art of existing works. The headline is well suited to the content of the manuscript. It is a complete work of good scientific quality, both on the experimental side and on the objective analyzes of the data. The statistical approach reflects the mastery and deep understanding of the subject. The choice of references is satisfactory. But maybe the authors can do better on the recent aspect of the list.