

Sleep bruxism, awake bruxism, or both? The importance of their complete reporting and diagnosis

Bruxism has been an important topic in recent publications in the Oral Diseases journal testing, particularly its association with genetic polymorphisms and bruxism (Nicot et al., 2021), genotype and snoring in individuals with Rett syndrome (RTT) (Lai et al., 2021), as well as bruxism prevalence in a population-based survey (Fehlberg et al., 2021). The criteria to diagnose bruxism have been established in a recent publication with the following recommendations: (a) “possible” sleep/awake bruxism based on a positive self-report only, (b) “probable” sleep/awake bruxism based on a positive clinical inspection, with or without a positive self-report, and (c) “definite” sleep/awake bruxism based on a positive instrumental assessment, with or without a positive self-report and/or a positive clinical inspection (Lobbezoo et al., 2018).

In the referred publications, one described the bruxism diagnosis as “probable” bruxism using self-reporting and clinical examination, but without specifying whether it was sleep or awake bruxism, or both (Nicot et al., 2021). Another publication did classify the time of the day when the bruxism was present (i.e., night, day, or both day and night) and frequency, but it did not specify the precision of the diagnosis itself as “possible” only, considering that only self-reporting was used (Lai et al., 2021). The last referred study did specify the bruxism diagnosis was “possible” based on self-reporting, but it did not specify whether it was sleep or awake bruxism, or both (Fehlberg et al., 2021).

The comments conveyed in this letter by no means reduce the relevance and methodological quality of these publications, but it does point out the importance of future studies to specify and standardize the bruxism diagnosis for future systematic reviews: (a) possible, (b) probable, or (c) definite. In our opinion, future studies should include not only self-reporting but also clinical examination, in order to reach a “probable” diagnoses if possible, considering that bruxism diagnosis as “definite” with instrumental assessment is expensive and time-consuming (Lobbezoo et al., 2018).

Finally, it is also important for future studies to specify which bruxism is being studied: sleep or awake, or both. The reporting of both SB and AB, alone and in combination, seems to be important according to the literature. For example, in one population study, the combination of SB and AB significantly increased the risk of developing TMD more (odds ratio (OR) = 2.6) than AB (OR = 1.7) or SB (OR = 1.8) alone (Sierwald et al., 2015). A systematic review of 39 articles also found that, in the majority of the studies ($n = 33$), this

association was positive; however, only five out of these 33 studies analyzed both SB and AB, indicating the need for more studies assessing both SB and AB (Jiménez-Silva et al., 2017).

As a final remark, we would like to congratulate the authors of the referred studies for their important and significant publications in the prestigious Oral Diseases journal.

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AUTHOR CONTRIBUTIONS

Camila Caspary Roithmann: Conceptualization; writing – original draft; writing – review and editing. **Marcio Lima Grossi:** Conceptualization; methodology; validation; visualization; writing – original draft; writing – review and editing.

PEER REVIEW

TRANSPARENCY OPTION (reviewer reports, author responses, and decision letter linked from Publons): Agree

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