

Abstract III

Jokubauskas L, Baltrušaitytė A. Relationship between obstructive sleep apnoea syndrome and sleep bruxism: a systematic review. *J Oral Rehabil.* 2017 Feb;44(2):144-153.

Obstructive sleep apnoea syndrome (OSAS) is a clinical risk factor for sleep bruxism (SB). Both OSAS and SB are reported to be associated with sleep-related arousal reactions, although no clear causative link has been established. An electronic literature search was conducted of the MEDLINE, ScienceDirect, Wiley Online Library, SAGE Journals and EBSCOhost databases covering the period January 2006 and September 2016. Sequential screenings at the title, abstract and full-text levels were performed. The review included observational studies in the English language with a clearly established aim to assess the relationship between OSAS and SB using full-night PSG. The seven-item quality-assessment tool for experimental bruxism studies was used to assess the methodology across the studies. After a comprehensive screening of titles, abstracts and full texts, only three studies that met the pre-defined criteria were finally included in this systematic review. Two studies gave evidence that OSAS is associated with the occurrence of SB events: (i) SB events frequently occur during micro-arousal events consequent on apnoea-hypopnoea (AH) events and (ii) most SB events occur in temporal conjunction with AH events termination. However, one study did not report a strong association between AH and SB events. It can be concluded that there are not enough scientific data to define a clear causative link between OSAS and SB. However, they appear to share common clinical features. Further studies should focus on the intermediate mechanisms between respiratory and SB events.