

**COMMENTARY**

Bruxism—What is missing in the new consensus definition?

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Rhythmic or phasic masticatory muscle activity unrelated to functional activities such as chewing and swallowing is commonly known as bruxism and labelled as parafunctional behaviour. The bruxism definition proposed in a 2013 international consensus paper was recently revisited and redefined.^{1,2} This meritorious effort clarified several controversial aspects of the previous definition. Most importantly, it was acknowledged that bruxism cannot be considered a primary disorder or disease. Instead, the newly proposed classification focuses on individual health outcomes of rhythmic or phasic masticatory muscle activity. It differentiates between bruxism consequences as harmless, adverse or protective.

The underlying genesis of masticatory muscle activity that characterises bruxism is unknown. Hence, a classification system pragmatically focusing on individual clinical outcomes is justifiable. Yet, in alignment with other symptom-based classifications, for example the International Classification of Headache Disorders, these forms could be categorised as primary bruxism. Juxtaposed to primary bruxism is secondary bruxism, the latter forms being attributable to an identifiable aetiology. For example, bruxism can be a secondary sign of neurodegenerative and hyperkinetic movement disorders such as primary dystonia, multisystem atrophy, Parkinson disease, Down syndrome, autistic spectrum disorders, Hutchinson disease, Batten disease, Rett's syndrome and other primary diseases. Secondary bruxism can even be the first disease manifestation.

Furthermore, it is noteworthy that rhythmic oro-facial movements indistinguishable from those classified as bruxism are common during epileptic seizures, particularly those of temporal lobe origin.³

Finally, bruxism secondary to medication and illicit drug intake is also possible, an aspect not mentioned in the newly proposed classification.⁴

Differentiating secondary from primary bruxism forms has important pragmatic implications regarding third-party reimbursement for diagnosis and treatment. We therefore advocate a still simple, yet more comprehensive bruxism classification system consisting of primary and secondary bruxism, both of which can be a harmless behaviour; a risk factor (when associated with negative health outcomes); or a protective activity (when associated with positive health outcomes). The degree of certainty required for classifying bruxism as secondary to a proposed aetiology requires further clarification.⁵

CONFLICT OF INTEREST

The authors have stated explicitly that there is no conflict of interest in connection with this article.

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1. Lobbezoo F, Ahlberg J, Glaros AG, et al. Bruxism defined and graded: an international consensus. *J Oral Rehabil.* 2013;40(1):2-4.
2. Lobbezoo F, Ahlberg J, Raphael KG, et al. International consensus on the assessment of bruxism: report of a work in progress. *J Oral Rehabil.* 2018;45:837-844.
3. Meletti S, Cantalupo G, Volpi L, Rubboli G, Magaouda A, Tassinari CA. Rhythmic teeth grinding induced by temporal lobe seizures. *Neurology.* 2004;62(12):2306-2309.
4. Falisi G, Rastelli C, Panti F, Maglione H, Quezada Arcega R. Psychotropic drugs and bruxism. *Expert Opin Drug Saf.* 2014;13(10):1319-1326.
5. Kuhn M, Türp JC. Risk factors for bruxism. *Swiss Dent J.* 2018;128(2):118-124.