



Letter to the Editor

Headache Pain Res 2026;27(2):165-166
pISSN: 3022-9057 · eISSN: 3022-4764
<https://doi.org/10.62087/hpr.2026.0014>

Comments on “Morning Headaches: An In-Depth Review of Causes, Associated Disorders, and Management Strategies”

Seong Taek Kim 

Department of Orofacial Pain and Oral Medicine, Yonsei University Dental Hospital, Yonsei University College of Dentistry, Seoul, Republic of Korea

We read with great interest the recent review on morning headache, which comprehensively discussed its multifactorial etiologies, including sleep-related disorders such as insomnia and obstructive sleep apnea (OSA).¹ We would like to highlight sleep bruxism (SB) as a potentially under-recognized contributor to morning headache.

SB is defined as masticatory muscle activity during sleep and is characterized by rhythmic (phasic) or sustained (tonic) contractions.² Repetitive nocturnal activation of the jaw-closing muscles may lead to muscle fatigue, ischemia, and myofascial pain, thereby contributing to headache on awakening. In addition, episodes of SB are associated with micro-arousals and transient autonomic activation, which may disrupt sleep continuity and lower the threshold for headache.^{2,3}

Polysomnographic studies have shown that SB events are temporally associated with arousal-related physiological changes.⁴ Furthermore, Vieira et al.⁵ reported a significant association between wake-up headache and SB, suggesting that SB may be an independent or contributory factor. Notably, among individuals with frequent SB, the prevalence of morning headache has been reported to be approximately 60%, underscoring the potential clinical relevance of SB in patients presenting with morning headache.⁵

The interaction between SB and OSA is also clinically relevant. Both conditions involve mechanisms such as sleep fragmentation and autonomic dysregulation and may therefore exert additive effects on morning headache.^{3,4} However, SB is often overlooked in patients who are evaluated primarily for neurological or respiratory causes. Screening for SB using clinical indicators, such as tooth wear and jaw stiffness, may improve diagnostic accuracy. In selected cases, occlusal splint therapy may reduce masticatory muscle load and alleviate symptoms.⁶

In conclusion, SB should be considered more explicitly in the diagnostic framework for morning headache.

Sincerely,

Seong Taek Kim, D.D.S., Ph.D.

Department of Orofacial Pain and Oral Medicine, Yonsei University College of Dentistry

AVAILABILITY OF DATA AND MATERIAL

Not applicable.

AUTHOR CONTRIBUTIONS

Conceptualization: STK; Writing—original draft: STK; Writ-

Received: April 9, 2026; **Accepted:** April 9, 2026

Correspondence: Seong Taek Kim, D.D.S., Ph.D.

Department of Orofacial Pain and Oral Medicine, Yonsei University Dental Hospital, Yonsei University College of Dentistry, 50-1 Yonsei-ro, Seodaemun-gu, Seoul 03722, Republic of Korea

Tel: +82-2-2228-3110, Fax: +82-2-393-5673, E-mail: k8756050@yuhs.ac

© 2026 The Korean Headache Society

© This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ing-review & editing: STK.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

FUNDING STATEMENT

None.

ACKNOWLEDGMENTS

None.

REFERENCES

1. Hong Y, Kang MK, Kim MS, Mo H, Cox RC, Im HJ. Morning headaches: an in-depth review of causes, associated disorders, and management strategies. *Headache Pain Res* 2025;26:66-79.
2. Lobbezoo F, Ahlberg J, Glaros AG, et al. Bruxism defined and graded: an international consensus. *J Oral Rehabil* 2013;40:2-4.
3. Manfredini D, Winocur E, Guarda-Nardini L, Paesani D, Lobbezoo F. Epidemiology of bruxism in adults: a systematic review of the literature. *J Orofac Pain* 2013;27:99-110.
4. Kato T, Thie NM, Huynh N, Miyawaki S, Lavigne GJ. Topical review: sleep bruxism and the role of peripheral sensory influences. *J Orofac Pain* 2003;17:191-213.
5. Vieira KRM, Folchini CM, Heyde MDVD, Stuginski-Barbosa J, Kowacs PA, Piovesan EJ. Wake-up headache is associated with sleep bruxism. *Headache* 2020;60:974-980.
6. Okeson JP. Management of temporomandibular disorders and occlusion, 8th ed. Elsevier; 2020.