

Sleep Bruxism: Myths, Misconceptions and Management Strategies



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Intended Audience: Dentists, Dental Hygienists, Dental Assistants, Dental Students, Dental Hygiene Students, Dental Assistant Students
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Conflict of Interest Disclosure Statement

- Dr. Noble has done consulting work for Procter & Gamble. He has no relevant financial relationships to disclose.

Introduction – Sleep Bruxism

The understanding of sleep bruxism involves more than just the grinding of teeth. The mechanisms of acid erosion and tooth softening, sleep bruxism vs. awake bruxism, the factors triggering bruxism, the use of occlusal splint therapy and restorative management will be discussed. Extensive clinical examples will be shown.

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Overview

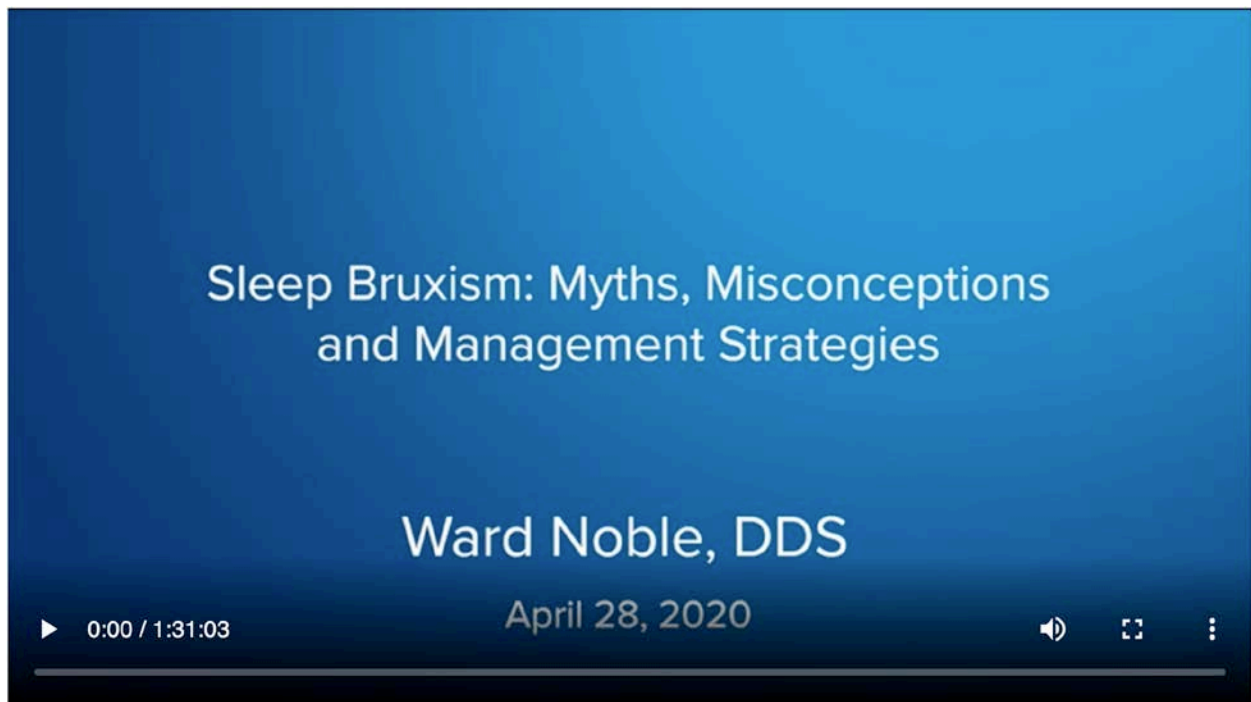
Knowledge of sleep bruxism has been clouded by various opinions, myths and conflicting concepts of parafunctional behaviors, including sleep bruxism, “awake” bruxism and clenching. Interactions among saliva, erosive tooth wear, sleep apnea and gastric reflux (GERD) will be discussed. This new knowledge will help guide practitioners toward useful and practical management strategies, including the use of occlusal devices.

Learning Objectives

Upon completion of this course, the dental professional should be able to:

- Describe the basic mechanisms of erosive tooth wear, including attrition, abrasion and acid erosion.
- Explain the differences between Sleep bruxism and “awake” bruxism.
- Describe occlusal splint therapy, with indications for use, including with implants.
- Discuss restorative strategies for treatment of severe occlusal wear.

Video: Sleep Bruxism



[Click on image to view video online.](#)

Course Test Preview

To receive Continuing Education credit for this course, you must complete the online test. Please go to: www.dentalcare.com/en-us/professional-education/ce-courses/ce630/test

- 1. Erosive tooth wear is characterized by initial surface softening and subsequent bulk tissue loss. What are the mechanisms for this process?**
 - A. Bacteria invades tooth biofilm and lowers pH.
 - B. Softened tooth structure can be removed with attrition and abrasion.
 - C. Tooth erosion is very slow so there is time to “watch and wait” and solve problems at recall visits.
 - D. Dietary acids play no role in the erosive process.
- 2. All these are *EXTRINSIC* acids EXCEPT:**
 - A. Fruit juice
 - B. Soft drinks
 - C. Swiss cheese
 - D. Energy drinks
- 3. Which of the following problems are NOT related to *INTRINSIC* acids in the erosive process?**
 - A. Bulimia
 - B. GERD
 - C. Acidic drinks
 - D. Anorexia
- 4. Sleep bruxism is MOST common in _____ and LEAST common in _____.**
 - A. children / adults over 65
 - B. middle age adults / children
 - C. adults over 65 / children
 - D. adults over 75 / infants under 2
- 5. Most bruxism occurs during the change from non-REM (Stage 2 sleep) into REM sleep?**
 - A. True
 - B. False
- 6. Awake bruxism is MOSTLY related to _____.**
 - A. Stress
 - B. Temporomandibular joint problems
 - C. Occlusal interferences
 - D. Gastric reflux (GERD)
- 7. The PRIMARY trigger of sleep bruxism is _____.**
 - A. Stress
 - B. Changes in respiration and heart rates
 - C. Occlusal interferences
 - D. Temporomandibular joint problems
- 8. During ‘awake bruxism’ patients can generate very high occlusal forces and may fracture teeth of restorations.**
 - A. True
 - B. False

9. **Gastric reflux which enters the mouth is MAINLY a result of _____.**
- A. convulsion of the stomach
 - B. obstruction of the trachea
 - C. relaxation of the lower esophageal sphincter
 - D. extended periods of coughing
10. **Toothpastes containing which of the following ingredients have been shown to be the MOST effective against erosive tooth wear?**
- A. Sodium fluoride
 - B. Zinc-based products
 - C. Calcium-based products
 - D. Stannous fluoride

References

1. Lussi A, Carvalho TS. Erosive tooth wear: a multifactorial condition of growing concern and increasing knowledge. *Monogr Oral Sci.* 2014;25:1-15. doi: 10.1159/000360380. Epub 2014 Jun 26.
2. Lavigne GJ, Khoury S, Abe S, Yamaguchi T, Raphael K. Bruxism physiology and pathology: an overview for clinicians. *J Oral Rehabil.* 2008 Jul;35(7):476-94. doi: 10.1111/j.1365-2842.2008.01881.x.
3. Salas MM, Nascimento GG, Vargas-Ferreira F, Tarquinio SB, Huysmans MC, Demarco FF. Diet influenced tooth erosion prevalence in children and adolescents: Results of a meta-analysis and meta-regression. *J Dent.* 2015 Aug;43(8):865-75. doi: 10.1016/j.jdent.2015.05.012. Epub 2015 Jun 7.
4. Kato T, Yamaguchi T, Okura K, Abe S, Lavigne GJ. Sleep less and bite more: sleep disorders associated with occlusal loads during sleep. *J Prosthodont Res.* 2013 Apr;57(2):69-81. doi: 10.1016/j.jpor.2013.03.001. Epub 2013 Apr 17.
5. Rouse JS. The Bruxism Triad. *Inside Dentistry.* 2010 May:32-42. Accessed January 5, 2021.
6. Hooper SM, Newcombe RG, Faller R, Eversole S, Addy M, West NX. The protective effects of toothpaste against erosion by orange juice: studies in situ and in vitro. *J Dent.* 2007 Jun;35(6):476-81. doi: 10.1016/j.jdent.2007.01.003. Epub 2007 Feb 27.
7. Carvalho TS, Colon P, Ganss C, Huysmans MC, Lussi A, Schlueter N, Schmalz G, Shellis RP, Tveit AB, Wiegand A. Consensus report of the European Federation of Conservative Dentistry: erosive tooth wear--diagnosis and management. *Clin Oral Investig.* 2015 Sep;19(7):1557-61. doi: 10.1007/s00784-015-1511-7. Epub 2015 Jul 1.
8. Mesko ME, Almeida RC, Porto JA, Koller CD, da Rosa WL, Boscato N. Should occlusal splints be a routine prescription for diagnosed bruxers undergoing implant therapy? *Int J Prosthodont.* 2014 May-Jun;27(3):201-3. doi: 10.11607/ijp.3883.
9. Goldstein RE, Auclair Clark W. The clinical management of awake bruxism. *J Am Dent Assoc.* 2017 Jun;148(6):387-391. doi: 10.1016/j.adaj.2017.03.005.

Additional Resources

- No Additional Resources Available.

About the Author

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Dr. Ward Noble graduated from the University of California, San Francisco and then completed a prosthodontic residency program at the University of Michigan. After being in private practice and teaching at UCSF for 35 years, he is now a Professor at the University of Pacific School of Dentistry in San Francisco, where he has received Excellence in Teaching Awards from both the faculty and students. He recently received a Lifetime Achievement Award from the Pacific Coast Society of Prosthodontists. He has presented over 250 presentations both nationally and internationally and has published numerous book chapters and articles.

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