Teeth grinding

December 2018

Teeth grinding, also known as bruxism, is a repetitive jaw-muscle activity that involves clenching or grinding of the teeth or thrusting of the jaw. This can happen while awake or during sleep.

Although it is difficult to know exactly how common it is, studies estimate that teeth grinding during sleep affects anywhere between 3.5 and 40 per cent of children, and 5.5 and eight per cent of adults. There are no differences between men and women, and it occurs less with age.

Teeth grinding is controlled by the brain, however it is unclear exactly why it occurs. Some possible reasons include:

- Genetic factors
- Neurochemicals
- Psychological, e.g. stress, personality traits, anxiety and depression
- Smoking, alcohol, and caffeine
- Medications (e.g. some antidepressants) and illicit drugs (e.g. ecstasy).

It was previously thought that teeth grinding was caused by the way teeth bite together, but this has been scientifically proven to be incorrect. Treatments to change your bite, such as orthodontic treatment, will not prevent it.

There is a possibility that sleep apnoea can occur at the same time as teeth grinding during sleep, however there is no proof that sleep apnoea plays a role.



Tooth wear

Wear involves loss of tooth surface or structure that is not caused by tooth decay. There are many reasons for tooth wear:

- Teeth wear at a very slow rate with age
- Acid erosion
- Teeth grinding
- Brushing your teeth aggressively.

Tooth wear can be the result of more than one thing such as grinding and drinking a lot of sugary drinks, but there is usually one main cause. It is important to know the exact cause of tooth wear as it determines the type of treatment. A general dentist, prosthodontist or oral medicine specialist can help you find the cause.

Do I need to worry about tooth wear?

Tooth wear with age is normal. When the amount of wear is more than what is usually seen for a person's age (too much too early), it can cause pain and sensitivity, or affect function and appearance, and treatment may then be needed. The earlier the condition is recognised and treated, the easier and less expensive it may be. When a lot of tooth loss has occurred, treatment is usually complex and lengthy.

ADA VICTORIA

Signs and symptoms of teeth grinding

You might be experiencing teeth grinding if you notice some or all of the following signs:

- Worn down, shorter teeth
- Chipped and cracked teeth, fillings or crowns
- Pain and tenderness in the facial and neck muscles in the morning
- Grinding noises – a bed partner may notice, but your partner may not hear anything if they are in deep sleep, and it may not happen every night.



Management

Some effective management options for teeth grinding and clenching may include:

- Protecting the teeth and any fillings or crowns. This is best done by using a custom-made splint (a type of mouth guard). Hard splints are better than soft ones. Do not use a ready-made splint without consulting your dental practitioner. Poorly fitted splints can cause further damage if the wear is due to tooth erosion. Splints that do not cover all the teeth may lead to unwanted tooth movement.
- Restoring the damaged teeth with fillings or crowns (when necessary, see above).
- Seeing a physiotherapist who has knowledge in treatment of this issue.

The following may help with muscle tenderness or aching:

- Using warm heat packs over the tender muscles
- Trying to eat softer foods and limiting jaw movements where possible
- Using over-the-counter pain relief and anti-inflammatory medications as directed, for short periods of time.

Studies on the use of Botox injections into some of the jaw muscles are being conducted. There is currently not enough evidence to support the routine use of these injections in the management of teeth grinding.

Helpful tips

- **Stop smoking and drinking coffee or alcohol at night**
- **Limit physical or mental activity before going to bed, and make sure you have a relaxing sleep environment**
- **Try relaxation techniques such as deep breathing, meditation, and yoga**
- **Address excessive psychological stress, anxiety or depression as these may aggravate your teeth grinding**
- **Visit your dental practitioner regularly.**

Further information

www.ada.org.au/Your-Dental-Health/Younger-Adults-18-30/Teeth-Grinding

www.dhsv.org.au/dental-advice/teeth-tips-and-facts/teeth-grinding

www.betterhealth.vic.gov.au/health/conditionsandtreatments/teeth-grinding

References

Available on request. Contact ask@adavb.org

ADA VICTORIA