

## What a grind: Bruxism at night likely a sign of stress by day

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You can practically track Steve Barkley's stress by the level of activity in his temporomandibular joint, or TMJ, the hinge joint that connects the lower jaw to the temporal bone of the skull and helps one chew, talk and yawn.

Although he didn't know it at the time, the Walnut Creek, Calif., stand-up comedian began grinding his teeth at night during the dot-com bust of 2000, when his Silicon Valley gigs disappeared and he was down \$12,000. That's when the horrendous morning headaches started, he says.

A year later, the terrorist attacks of Sept. 11 cost him \$6,000 more in jobs. At a routine appointment, his dentist took one look inside Barkley's mouth and knew the culprit. "He said, 'You're grinding your teeth like crazy,'" recalls Barkley, 57.

But the ultimate "nail in the coffin" came three years ago, when Barkley lost a \$65,000 contract gig. He fell behind in child support, and, because of the dire job market, couldn't find work of any kind. His bruxism, or teeth grinding, became so severe that he broke two molars, had one extracted, and, without health insurance, was out thousands of dollars in medical bills.

"There's got to be a way for the body to release stress," he says. "I did it at night by grinding my teeth to bits."

Barkley is not alone. It is estimated that 10 to 15 percent of adults grind their teeth, according to Matthew Messina, a Cleveland dentist and consumer adviser for the American Dental Association. According to experts, that number and the grinding severity can rise significantly in times of stress, from tax season to the current recession.

"It's the Clint Eastwood muscle," says Curtis Barmby, a Walnut Creek prosthodontist, or reconstructive dentist, who works with many patients who suffer from temporomandibular disorders, or TMD. "When people are stressed, we have this fight or flight reaction. The shoulders go up, the teeth come together and the head comes forward." Before long, he says, those muscles start screaming for relief. Less frequently, bruxism can be a reaction to certain medications or an abnormal bite.

While some wear and tear is natural -- children grind their teeth at night when they're losing baby teeth -- prolonged grinding or clenching of the jaw can cause facial soreness, headaches, neck pain and serious damage to the gums, bones and teeth, says Steven Goldman, a Walnut Creek dentist of 42 years and a professor in UCSF's department of restorative dentistry. In less than 10 percent of patients, the teeth are ground so low that all of them must be reconstructed, he adds.

It's no surprise. The masseter -- the thick muscle in the cheek that aids in chewing -- is arguably the strongest in the human body, and it is estimated that teeth grinders can exert as much as 600 pounds per square inch on their back molars while they're sleeping, he adds. But, because bruxism is controlled by the central nervous system, it is of utmost importance to receive a proper diagnosis before treating TMD, Goldman says. Too many patients, he believes, are overtreated or misdiagnosed.

"If someone comes in complaining about jaw soreness and headaches, you don't necessarily fix them by tapping on teeth," he says. "Dentists need to stop, look and listen. To adjust someone's whole bite and find

out they have an arthritic problem is not good."

Diagnosing and treating Barkley was easy. His dentist prescribed a hard, rubber mouth guard that sits on Barkley's upper teeth and cost him \$400. The guard (and steady jobs) have eliminated his bruxism. Guards in addition to anti-inflammatories and muscle relaxants are common treatments for bruxism. Guards range from the \$20 pharmacy variety to customized bite appliances that cost up to \$2,000.

A guard saved Susan Wittstock from long-term dental damage. Wittstock, of Berkeley, Calif., had bruxism for more than three decades. She suffered a chipped front tooth and a crack in one molar before she finally was fitted for a guard two years ago -- and got relief.

"Before using it (the guard), it would feel like someone had taken a two-by-four and whacked me upside the head," says Wittstock, now 50. "I had headaches in the temporal area that would last for days, and aspirin wouldn't touch it."

## SIDE EFFECT

Not everyone who suffers from bruxism needs a guard, or even damages her teeth. Charlotte Johnson's jaw clenching was a side effect of an anti-anxiety medication she was on for a brief time. Johnson, of Bethel Island, Calif., was put on muscle relaxants to reduce the tension in her jaw area. Ultimately, however, a few visits to a physical therapist eliminated the deep ache.

"He taught me how to stretch out the muscle gently and apply ice for pain relief," says Johnson, 69. "I used to suffer constantly."

Goldman and Barmby are big proponents of physical therapy and biofeedback. "When people come in and say, 'My spouse lost his job, we

don't have insurance, please tell me a temporary fix because I'm going nuts clenching on my teeth,' I tell them to spend \$85 for one visit with a good physical therapist," Goldman says.

Also, he advises people to be aware of their sleep patterns. "Someone who is not sleeping well is more likely to have an active jaw because grinding is largely a nighttime phenomenon that occurs in the shallow stages of sleep," Goldman says. Sometimes, sleep aids and muscle relaxants are prescribed to help move the sufferer into a deeper sleep.

For some people, listening to one's body can be the ultimate cure. Fifteen years ago, Denise Parla of Oakley, Calif., woke up most mornings with a sore face and jaw. Parla, now 45, was diagnosed with TMD and saw a chiropractor who taught her massaging techniques. Eventually, she was pain-free.

Still, following a divorce, foreclosure and job changes, the tension -- and clenching -- can creep back. At the end of a stressful day, Parla is still not immune to tightening her jaw.

"But I become aware of it now," she says. "My kids even see it and tell me. So, I just loosen up and try to handle my stress better. I just learned to see the signs."

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