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## PTSD Patients Damage Teeth Through Involuntary Grinding, Clenching, UB Study Finds

Researchers also find more tooth plaque and gum disease

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CHICAGO -- As if persons with posttraumatic stress disorder didn't have enough to worry about, research now shows their stress-related symptoms could be damaging their teeth.

An oral health assessment of patients with long-term posttraumatic stress disorder (PTSD) at the Buffalo VA Medical Center, conducted by periodontists from the University at Buffalo School of Dental Medicine, revealed significant erosion of tooth surfaces among PTSD patients compared to controls.

The patients also had significantly more tooth plaque and gingivitis, a form of gum disease.

Results of the research were presented here today (March 8, 2001) at the annual meeting of the American Association for Dental Research.

Teeth of PTSD patients showed increased erosion vertically and horizontally near the gum line, as well as on biting surfaces, said Sebastian Ciancio, D.D.S., professor and chair in the Department of Periodontology in the UB School of Dental Medicine and senior author on the study.

"This wearing away of the tooth surface along the neck of the tooth where the enamel meets the root surface may be caused by bruxism and clenching, which is high in this group of patients," he said. "The increased plaque and gingivitis suggests that these patients, perhaps because of their illness, do not carry out good oral hygiene compared to non-PTSD patients." Bruxism, or grinding the teeth, and clenching are involuntary actions that occur primarily during sleep.

The study involved 40 patients at the VA Medical Center diagnosed with 100 percent disability due to PTSD who came to the center's dental clinic for treatment. They were compared with 40 sequential dental clinic patients without PTSD. The PTSD patients were receiving standard treatment for their condition. All participants received an oral examination and evaluation of tooth wear.

Results showed significantly increased wear of tooth surfaces in three dimensions near the gum line -- vertical, horizontal and depth -- in those with PTSD compared to controls. Erosion vertically was more than three times greater, horizontally more than four times greater and more than 10 times greater in depth than controls.

These results were consistent with documentation of habitual tooth grinding and clenching among persons with PTSD, Ciancio said.

"Dental patients with PTSD need additional treatment planning to prevent further loss of tooth surfaces," he said, "and need to work with their dentist to rehabilitate the damaged teeth."

Also participating in the study were Margaret Vitello, dental hygienist at the Buffalo VA Medical Center, and Guy Ditursi, D.D.S., clinical instructor in the UB Department of Oral Diagnostic Sciences and Buffalo VA Medical Center.

Original URL: <http://www.buffalo.edu/news/fast-execute.cgi/article-page.html?article=50630009>

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