

Periodontitis linked to HPV-positive head, neck tumors

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Image courtesy of Blausen Medical

For patients with head and neck squamous cell carcinoma there is an increased risk of human papillomavirus-positive tumors among those with a history of periodontitis, according to a study published online June 18 in the *Archives of Otolaryngology -- Head & Neck Surgery*.

(HealthDay) -- For patients with head and neck squamous cell carcinoma (HNSCC) there is an increased risk of human papillomavirus (HPV)-positive tumors among those with a history of periodontitis, according to a study published online June 18 in the *Archives of Otolaryngology -- Head & Neck Surgery*.

Mine Tezal, D.D.S., Ph.D., from the State University of New York at Buffalo, and colleagues evaluated dental records and tissue samples from 124 patients over the age of 21 years diagnosed with incident primary [squamous cell carcinoma](#) (SCC) of the oral cavity, oropharynx, and larynx between 1999 and 2007. Alveolar bone loss measured from panoramic radiographs was used to assess [periodontitis](#) history, and the correlation between periodontitis and HPV status of HNSCC was evaluated.

The researchers found that the prevalence of HPV-positive HNSCC was 40.3 percent, with a higher proportion of oropharyngeal cancers HPV positive compared with oral cavity and laryngeal cancers (65.3 versus 29.0 and 20.5 percent, respectively).

The odds of HPV-positive tumor status increased with each millimeter of alveolar bone loss (odds ratio [OR], 2.61), even after adjustment for age at diagnosis, sex, and smoking status. The odds of HPV-positive tumor status were greater among patients with oropharyngeal SCC (OR, 11.70), compared to those with oral cavity SCC (OR, 2.32; 95 percent confidence interval [CI], 0.65 to 8.27) and laryngeal SCC (OR, 3.89; 95 percent CI, 0.95 to 15.99).

"A history of chronic inflammatory disease in the oral cavity may be associated with tumor HPV status in patients with HNSCC," the authors write.

More information: [Abstract](#)

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