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Response from Dr. Cleveland and colleagues

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We would like to thank Dr. Fleisher for taking the time to review and respond to our article. As we carefully pointed out in our article, human papillomavirus (HPV)-associated oropharyngeal cancers commonly involve the base of the tongue and tonsils, and rarely occur in the oral cavity. We agree with Dr. Glick and Dr. Newell Johnson in their August 2011 guest editorial1 when they say, “Precision is needed about the site of origin of these cancers, as lesions at different anatomical locations can have different etiologies and different outcomes. To follow and compare epidemiologic studies, there needs to be agreement regarding terminology ….”

One of the major issues Dr. Fleisher poses involves communicating with our patients about methods to prevent oral HPV infection and HPV-associated oropharyngeal cancers. Patients should understand that HPV vaccines are effective in preventing certain HPV infections and cancers,[2,3] but their effectiveness in preventing oral HPV infection or oropharyngeal cancer is unknown. Because the HPV types targeted by the vaccines also are the main types responsible for oropharyngeal cancer, both of the available HPV vaccines might reduce disease burden. However, the impact of HPV vaccines on these cancers would not be apparent for many years.

Tobacco and alcohol use may increase the risk for some HPV-associated oropharyngeal cancers in addition to non-HPV-associated head and neck cancers.[4] Tobacco-use prevention and cessation programs have been shown to be effective in reducing the number of tobacco users.[5] As we noted in our article, dental health care personnel should ask patients about their tobacco and alcohol use, inform users about associated risks, encourage tobacco-use cessation and provide appropriate counseling.

Some studies have shown that oral HPV infection is associated with oral sex or other sexual behaviors, while other studies have not.[6,7] In addition, important questions remain unanswered about oral HPV infection and its link to oropharyngeal cancers. For example, what cofactors contribute to oral HPV infection's leading to cancer? What is the persistence and clearance of infection in the oral cavity, and does persistent infection lead to cancer? What is the latency period between infection and carcinogenesis? Until we have more information on the natural history of these cancers, dental personnel should continue to promote proven risk reduction strategies such as tobacco-use cessation and limiting alcohol use.

References

1. Glick M, Johnson N. Oral and oropharyngeal cancer: what are the next steps (editorial)? JADA. 2011; 142(8):892–894. [PubMed: 21804052]
2. Centers for Disease Control and Prevention. FDA licensure of Quadrivalent Human Papillomavirus Vaccine (HPV4, Gardasil) for use in males and guidance from the Advisory Committee on Immunization Practices (ACIP). MMWR Morb Mortal Wkly Rep. 2010; 59(20):630–632. www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a5.htm. Accessed March 29, 2012. [PubMed: 20508594]
3. Centers for Disease Control and Prevention. FDA licensure of Bivalent Human Papillomavirus Vaccine (HPV2, Cervarix) for use in females and updated HPV vaccination recommendations from the Advisory Committee on Immunization Practices (ACIP). MMWR Morb Mortal Wkly Rep. 2010; 59(20):626–629. www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a4.htm. Accessed March 29, 2012. [PubMed: 20508593]
4. Smith EM, Rubenstein LM, Haugen TH, Hamsikova E, Turek LP. Tobacco and alcohol use increases the risk of both HPV-associated and HPV-independent head and neck cancers. Cancer Causes Control. 2010; 21(9):1369–1378. [PubMed: 20401530]
5. Fiore, MC.; Jaén, CR.; Baker, TB., et al. Treating Tobacco Use and Dependence: 2008 Update—Clinical Practice Guideline. Rockville, Md: U.S. Department of Health and Human Services, Public Health Service; 2008. www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf. Accessed March 29, 2012
6. D'Souza G, Agrawal Y, Halpern J, Bodison S, Gillison ML. Oral sexual behaviors associated with prevalent oral human papillomavirus infection. J Infect Dis. 2009; 199(9):1263–1269. [PubMed: 19320589]
7. Kreimer AR, Villo A, Nyitray AG. The epidemiology of oral HPV infection among a multinational sample of men. Cancer Epidemiol Biomarkers and Prevention. 2011; 20(1):172–182.