Knowledge Assessment of the Dental Community in Texas on the Role of Human Papilloma Virus in Oropharyngeal Cancer

ABSTRACT

Objectives: The epidemiology of oral cancer is changing. From 1988 to 2004, there has been a dramatic increase in Human Papilloma virus (HPV) positive oropharyngeal squamous cell carcinoma (OPC) in the U.S. At the same time there have been decreasing rates of OPC associated with the traditional risk factors of smoking and alcohol consumption. The epidemiology of oral cancer is changing. As the epidemiology changes, it is important that the dental community recognize these factors. The goal of this study was to assess the baseline level of knowledge about HPV and OPC within the Texas dental community.

Methods: Practicing dentists and dental hygienists from Texas dental professional networks and dental students from the three Texas schools of dentistry were recruited to participate in the study. Participants were requested to access and complete a 7-item online survey. To ensure anonymity, a third party practice facilitator or department administrator disseminated the survey link to participants.

Results: Of the 457 surveys completed, 100% of respondents reported conducting oral soft tissue examinations at least annually. However, only 73% included the oropharynx in their exam. Less than 50% of dental professionals selected the correct location of the greatest increase in oral cancer incidence during the last 10 years. Less than 30% of each of the groups answered correctly in indicating the age group with the most rapidly increasing incidence of oral cancer. Approximately 40% of all groups indicated that a biopsy from the posterior oropharynx should be tested for HPV.

Conclusion: Survey results across Texas dentists, dental hygienists, and Texas dental students demonstrated a lack of knowledge of the changing profile of oral cancer regarding HPV-associated OPC. This aim of this initial phase was to determine the baseline level of knowledge surrounding the risks associated with oropharyngeal cancer in the survey population. Our goal is to utilize these findings to develop educational interventions that will be disseminated throughout the dental community in Texas to improve diagnosis of these devastating cancers.

KEY WORDS
Detection, HPV, oropharyngeal cancer, prevention
Updates Regarding Diagnostic Adjuncts for Oral Squamous Cell Carcinoma

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ABSTRACT

The 5-year survival rate for oral cancer (66%) is still one of the lowest among major human cancers, and delayed diagnosis until an advanced stage is thought to be the main factor contributing to this low survival rate. The detection and diagnosis of oral cancer is currently based on clinical visual examination and histopathological evaluation of a biopsy specimen. In response to the need for early detection of oral cancer, several diagnostic adjuncts have been developed and sold commercially over the years, including vital tissue staining, brush cytology, light-based visualization adjuncts, and the most recently developed test for salivary biomarkers for oral cancer. The purpose of this article is to review the current knowledge and research regarding these diagnostic adjuncts developed for early detection of oral cancer. Clinicians are best served by an awareness of the advantages and disadvantages of each adjunct, and to always consider and correlate with the clinical findings when interpreting the test results from these adjuncts.