

Oral Lesions and Cancer Study

Cancer of the oral cavity (mouth, tongue, and pharynx) is responsible for approximately 30,000 new cases and 7,500 deaths each year in the United States. The 5-year survival rate for patients with advanced cases of oral cancer is 19% compared to 78% for patients with localized disease.

Determining the presence of oral lesions is an essential activity in dental practice. To better estimate the type and frequency of oral lesions seen in the general dentist's practice, a weekly return study of oral lesions was conducted this past summer in 24 CROWN offices, with the assistance of two 1st year dental students, Dan Smith and Matt Slivka. Dr. Danny Sawyer conducted a 3-hour oral pathology refresher course for 57 providers (dentists and dental hygienists) with each provider receiving a copy of *Oral Soft Tissue Diseases: A Reference Manual for Diagnosis and Management* by JR Newland et al. for reference. Each provider agreed to screen all patients over a 3-week period for oral lesions and record patient descriptives (age, sex, tobacco use, dentures present) and lesion description on patients who had any type of oral lesion and who provided verbal consent to be included in the study. Providers were given a structured data collection form on which to record their observations. In addition to collecting the oral lesion data, participating dentists and dental hygienists completed questionnaires before and approximately 6 weeks after the oral pathology course on their knowledge, opinions and behaviors regarding oral cancer exams.

Examinations were performed on 2866 adults, 866 (30.9%) of whom presented with 1144 lesions. The most prevalent lesion observed was frictional keratosis (26.4%) followed by amalgam tattoo (14.0%), traumatic ulcers (12.2%) and fissured tongue (8.8%). Twenty-four lesions were classified as leukoplakia and 8 as erythroplakia. Lesions were slightly more prevalent in males (33.9%) than females (31.5%). Seventy-seven percent of lesions were observed in patients >40 years of age and 21.0% were in tobacco users. Most lesions (40.6%) were detected during a hygienist visit and 19.5% of lesions were detected during restorative visits with the dentist. Two lesions were biopsied, 35 referred to specialists and 72 were treated. Sufficient numbers of oral lesions are present in practices to keep diagnostic acumen sharp. Dental providers need to be vigilant about detecting oral lesions, especially in tobacco users and hygienists play an important role in alerting the dentist and patient to the presence of oral lesions for observation or further diagnosis.

From the completed questionnaires, the strongest perceived barriers to oral cancer exams were reluctance to perform lymph node palpation (LNP) (26%), lack of time (24%) and inadequate training (22%). Most providers (90.7%) reported screening their at-risk patients at least yearly, but fewer reported they performed a LNP at each screening (64.8%) or instructed their patients to perform an oral self-exam (63%). After the CE course, providers increased their knowledge scores, reported greater confidence in their ability to perform an oral cancer exam and were less likely to cite inadequate training as a barrier to oral cancer exams.

The full study results are being presented in oral and poster form by Dan and Matt at the meeting of the AADR in March, 2006. Both students were American Cancer Society Silber Summer Fellows and the materials for the study were provided by the American Cancer Society through an Ireland Cancer Center Institutional Grant to the study investigator, Dr. Catherine Demko.