

# RADA Oral Cancer Project

## Oral Cancer Screening: A pilot study

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**O**n Wednesday November 28, 2007, Dentists from the Russian American Dental Association in conjunction with the Dental Hygiene Department of the New York City College of Technology launched a pilot study to evaluate the potential efficacy of an Oral

Cancer Screening in downtown Brooklyn (1). The Dental Hygiene Clinic at NYCCT was found to be an ideal environment to further these collective goals: increase community awareness of oral cancer; increase oral cancer screenings in patients with a known disparity in access to health care, increase the number of New Yorkers screened for oral cancer and ideally increase the early detection of oral cancer.

Approximately 35,310 new cases of oral cancer will be diagnosed in the United States in 2008, and an estimated 7,590 people will die of the disease (2). Oral cancer is defined as cancer of the mouth and pharynx. More than 90% of all oral malignancies are squamous cell carcinomas. Those who both smoke and drink have a 15 times greater risk of developing oral cancer than others. The risk of developing oral cancer is dose-dependent and time-dependent. Of those newly diagnosed individuals, only half will be alive in 5 years. The death rate associated with oral cancer is particularly high as lesions are characteristically discovered late in development. Early diagnosis is associated with better prognosis and decreased treatment-related disfigurement.

Flyers describing the oral cancer screening as comprehensive, painless and free were distributed to local community newspapers. Appointments were not required and patients were seen between the hours of 10am to 4pm. The initial examinations were performed by students from City Tech. They interviewed patients, reviewed demographic data, recorded both medical and dental histories, and performed extra-oral and intra-oral examinations. Dentists from RADA and faculty from City Tech reviewed their findings.

According to the NIH (3) there is no standard or routine screening test for oral cancer, and a dentist, hygienist or physician may do screenings for oral cancer. During the intra-oral exam trained clinicians look for white (leukoplakia) and red (erythroplakia) lesions on the mucous membranes focusing attention on those areas more likely to be associated with the development of pre-malignant and cancerous lesions including the floor of the mouth, tongue and soft palate.

Of the sixteen patients who participated in the pilot study/oral cancer screening two were found to have significant lesions. The first patient seen at the screening, a 60-year-old Hispanic male presented with a perioral melanotic nodule, 1 cm. by 1 cm. in size, with variegated pigmentation, and irregular borders clinically consistent with melanoma. The fifth patient screened, a 55-year-old Caucasian male, presented with a well-defined nodule of the upper lip. Both patients were referred for further evaluation and biopsy. Confirmation of the biopsy was received on the fifth patient who was subsequently treated for a benign salivary gland tumor. Other patients presented with Denture Stomatitis, Angular Cheilitis, Herpes Recurrans, lymphadenopathy, dental (periapical) abscess and acute tonsillitis. These patients also received appropriate referrals to local oral surgeons, ENT physicians, periodontists or hospital clinics.

In conclusion, the participating Dentists from RADA Dental Hygiene Faculty and students from NYCCT found the pilot study supported the theory that a wide reaching Brooklyn based comprehensive oral cancer screening could be effectively undertaken using the Dental Hygiene Clinic facilities at NYCCT and that the patient population served by this screening will benefit greatly.

1. The role of internal pilot studies in increasing the efficiency of clinical trials. Wittes J, Brittain E. Stat Med. 1990 Jan-Feb; 9(1-2):65-71; discussion 71-2.
2. American Cancer Society. Cancer Facts and Figures 2008. Atlanta, GA: American Cancer Society, 2008.
3. <http://www.cancer.gov/cancertopics/pdq/screening/oral/Patient/page3>