



Role of Dental Profession in Oral Cancer Prevention and Diagnosis

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INTRODUCTION

The incidence of oral cancer is increasing worldwide. Malignant neoplasms of the mouth and pharynx have been rated as the 10th most common cancer in men and 7th in women, though geographical variations exist.¹ Generally, in a society, oral cancer is not properly understood. The sign and symptoms are frequently overlooked in the initial stages when it is responsive to treat. The vital areas that should be carefully examined by the dentist include oral cavity and oropharynx, essentially in tobacco and alcohol users. Oral potentially malignant lesions (OPMDs) include leukoplakia, erythroplakia, oral submucous fibrosis, lichen planus, dysplastic leukoplakia, and dysplastic lichenoid lesion.² These disorders of the oral mucosa may be dysplastic, clinically irregular, show color changes (red, red-white), show alterations in surface texture (granular, verrucous), and are usually at highest rate of malignant transformation.²

In developing countries, there is no availability of population-based screening programs for OPMDs. However, in some countries, screening is frequently carried out by professionals and health care auxiliaries.

The dentists and the members of wider dental team should understand the signs and symptoms of oral cancer and should receive a standardized protocol regarding early detection and characterization of the stages of oral cancer.³ Oral ulcers that fail to resolve within 2 weeks after suitable treatment should be suspected as cancer until confirmed otherwise. Induration is the main sign of malignancy. It is thus essential that all areas with a visual irregularity are palpated to include or exclude induration.⁴

The human papilloma virus (HPV) is considered to have oncogenic potential. The HPVs types 16 and 18 are increasingly being found in oral lesions, and screening for their presence may help in detecting the lesions at risk of malignant transformation. Anti-HPV vaccines may also be recommended to high-risk patients to eradicate HPV-associated mucosal lesions.⁵

Dental practitioners can principally play a vital role not only in prevention but also in timely detection of oral cancer. General population attends dental practitioners on a regular basis compared to most other divisions of the health. Dentists are trained and competent enough to recognize any abnormal changes in and around the mouth related to nutritional deficiencies or as a result of alcohol and tobacco use. The high-risk patients should receive a full mouth examination by their dentist every 6 months. This would assist in prompt detection of asymptomatic ailment that usually patients are not familiar with.⁶ Every dentist should always palpate lymph nodes of the head and neck as part of the clinical examination.

Dental hygienists could easily recognize tobacco user by seeing tobacco stains on the teeth and with compromised periodontal health. The hygienist can play an important role in educating the patient regarding tobacco cessation and also by referring cases to a smoker's clinic for further support. If a hygienist comes across any suspicious lesion during prophylaxis procedure, then it should be brought to the direct consideration of the dentist.

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Receptionists in dental practices can help in reassuring the patients and encouraging them to attend the dentist.

About 15% of patients are likely to develop second primary tumor following treatment for the index tumor. However, recurrence and metastatic cancer is also common in head and neck region. Therefore, continuing care in dental practices by regular mouth examinations beyond the first 5 years is important for this group of survivors.³ Almost all patients receiving radiotherapy for head and neck tumors and nearly 40% of patients receiving chemotherapy are likely to suffer from oral complications, such as mucositis, xerostomia, and functional disabilities. These complications are debilitating for the patients and dental advice at the right time can greatly improve their quality of life.⁷

Dental health awareness messages can be focused toward different communities in a particular area by the dental team. The aim should be to educate different sectors of the population, such as youth, factory employees, and students at a local school and self-examination should be taught. Dentists can get appropriate literature from many sources, including dental health program agencies,

national dental associations, and cancer awareness organizations, and can spread the awareness.⁸

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