Dental Materials 2018: The early detection of oral cancer: No longer a disease of the old - Ben F Warner - University of Texas Health Science Center at Houston

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Oral cancer awareness by the public is essent ial to addressing the need for routine screenings. The risk factors for oral cancer have expanded. Human Papilloma Virus (16 and 18) must now be included with the usual concerns of tobacco use and alcohol abuse. The gold standard for cancer diagnosis is the histopathological analysis of a suspected lesion. However, a lesion must first be detected. Oral cancer screening is a pillar of comprehensive and periodic oral evaluations and early detection reduces the morbidity and mortality. The goal of early detection may be more easily achievable with the use of auto fluorescence technology. If a clinician can visualize a potentially harmful lesion easier, then this earlier detection may lead to improved prognosis. When oral tissue is exposed to a blue wavelength of light, the endogenous fluorophores are excited to emit a green wavelength. With the appropriate filter, the healthcare provider can visualize the resulting auto fluorescence. Normal tissue appears varying shades of green and abnormal tissue typically appears dark. Since premalignant dysplasia may not be readily apparent to the naked eye, this technology can be useful in detection of oral mucosal abnormalities. However, it must be noted that vascular lesions, pigmented lesions, and amalgam tattoos have decreased fluorescence. Diascopy, applying pressure to evaluate if the lesion blanches, can assist the clinician in determining whether a lesion is vascular/inflammatory or nonvascular. Physiologic pigmentation and amalgam stain do not blanch. There are several types of devices available.

These will be presented. The gadget produces coheren radiation in the noticeable or Cancer of the head and neck including all oral, laryngeal, and pharyngeal sites, is the sixth most common cancer, accounting for about 643,000 new cases annually. Approximately three-quarters of oral and oropharyngeal squamous cell carcinomas (OOSCCs) occur among those living in developing countries. In Southeast Asia, OOSCCs account for 40% of all cancers compared with approximately 4% in the developed countries. Five-year survival of oral cancer varies from 81% for patients with localized disease to 42% for those with regional disease and to 17% if distant metastases are present. Patients with early lesions have better chances for cure and less treatment associated morbidity, yet despite the easy accessibility of the mouth, most patients present with advanced tumors, when treatment is more difficult, more expensive and less successful compared with earlier interventions.

This is largely due to the fact that most advanced lesions are accompanied by extensive invasion and infiltration of important local structures leading to tongue immobility, disturbance of motor or sensory innervation, metastatic spread to lymph nodes that further reduces the chances of survival.

The most logical approach to decreasing morbidity and mortality associated with oral cancer is to increase detection of suspicious oral premalignant lesions and oral malignancies at an early stage. If premalignant or potentially malignant lesions are identified early enough, malignant changes may be prevented altogether or at least the chances of success of the treatment at an early stage are more. Early detection of oral premalignant lesions (OPLs) and early neoplastic changes may be our best and most cost-effective means to improve survival and quality of life for oral cancer patients from all socioeconomic communities.

A healthy diet, good oral and sexual hygiene, and awareness of the signs and symptoms of disease are important. Success depends on political will, intersectoral action, and culturally sensitive public health messages disseminated through educational campaigns and mass media initiatives. The purpose of this article is to create awareness among the general practitioners and to emphasize the importance of including comprehensive head and neck examination as a part of the general medical check-up. isk increases substantially with duration and frequency of tobacco use; risk among former smokers is consistently lower than among current smokers, and there is a trend of decreasing risk with increasing number of years since quitting.

Use of smokeless tobacco and alcohol in combination with tobacco smoking greatly increases the risk of oral cancer. The biological plausibility is provided by the identification of several carcinogens in tobacco, the most abundant and strongest being tobacco-specific N-nitrosamines, such as N-nitrosonornicotine here we are presenting case reports of two patients where lesion appeared innocuous but considering the associated risk factors, further investigations were carried out and lesions turned out to be dysplastic. Treatment was advised and thus the morbidity associated with the treatment of oral cancer in late stages was avoided.