

Is oral cancer one of the top most serious cancers globally?

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Abstract

Oral cancer is one of the top ten most serious cancers globally, with a late clinical diagnosis, a poor prognosis, a lack of clear biomarkers for the condition, and costly treatment options. The aim of this study is to present the most basic facets of this cancer. Oral cancer is a preventable condition with well-understood risk factors and a well-understood natural history.

Keywords: Oral Cancer, Smoking, Alcohol.

Accepted on March 26th, 2021

Introduction

Today, cancer is one of the main causes of morbidity and mortality. Tobacco use, poor diets, alcohol use, inactive lifestyles, and infection are believed to be responsible for about 43% of cancer deaths. Environmental carcinogens, smoking, infectious agents, and tobacco consumption are also risk factors that low-income and vulnerable people are more likely to be exposed to [1]. These communities may have less access to community care and health education, which will allow them to make decisions about their own health security and change. Oropharyngeal cancer accounts for a large portion of the overall cancer burden. Tobacco and alcohol are two of the most common causes of oral cancer. The population-attributable risks of smoking and alcohol intake have been projected to be 80% for men, 61% for women, and 74% overall. The International Organization for Research on Cancer recently verified the evidence that smokeless tobacco causes oral cancer. High consumption of alcoholic drinks has been linked to nutritional deprivation, which tends to lead to oral carcinogenesis independently [2]. Oral cancer should be prevented by addressing risk factors. AIDS-related cancers such as Kaposi sarcoma

and lymphoma would be less common if HIV infection is prevented. The WHO Global Oral Health Programme is dedicated to developing country capability in oral cancer prevention, inter-country sharing of knowledge and perspectives from interconnected approaches to prevention and health promotion, and global monitoring programmes for oral cancer and risk factors [3].

The World Health Organization's Global Oral Health Project has developed a global oral cavity cancer monitoring system to assess risk factors and aid in the preparation of successful national prevention programmes. The National Oral Health Data Bank stores epidemiological data on oral cancer prevalence and mortality (ICD-10: C00-C08). For the first time in 25 years, the World Health Assembly (WHA) passed a resolution on oral health in 2007, which included prevention of oral cancer. To ensure that oral cancer prevention is an important part of national cancer-control programmes, and to provide oral-health providers or primary health-care staff with appropriate oral-health training in screening, early diagnosis, and treatment;- The WHO Global Oral Health Organization will use this declaration as the foundation for its oral cancer-control work [4].

Oral cancer is a big public health concern that affects everybody, particularly dental surgeons. It is among the top ten cancers in terms of prevalence, and despite advances in study and treatment, survival has remained stagnant in recent years, posing a growing obstacle for biomedical science. Oral cancer is a form of malignant neoplasia that develops on the lips or in the mouth. Since 90% of cancers in the dental field are histologically originated in squamous cells, it is historically known as a squamous cell carcinoma (OSCC). It has a variety of differentiation thresholds and a proclivity for lymph node metastasis [5].

Risk Factors

Oral cancer is a preventable disorder in which significant risk factors such as smoking and alcohol are present in 90% of cases, creating a synergistic impact.

Smoking

“There is very evidence to demonstrate that snuff smoke is carcinogenic, and that it causes cancer of the oral cavity and pancreas,” the IARC concluded in 2007. When compared to nonsmokers, smokers have a threefold increased chance of contracting oral cancer. Furthermore, as opposed to those who have never smoked, the incidence of oral cancer is 35 percent lower in people who stopped smoking four years earlier than those who choose to smoke, and not higher in those who have no smoking antecedents for more than 20 years. An atmosphere of tobacco smoke is still dangerous; people who never smoked but were exposed to cigarette smoke (involuntary smoking) had an 87 percent greater chance of oral cancer than those who never smoked but were not exposed [6]. Cigarette smoking decreases oral immunity by inducing gingivitis, periodontitis, and oral cancer.

Alcohol

Alcohol (ethanol) may be a local as well as a systemic risk factor, it increased permeability of the oral mucosa, dissolving lipid components of the epithelium, inducing epithelial atrophy and interfering with DNA synthesis and repair; it

also has genotoxicity and mutagenic impact. Reduced salivary flow reduces the liver's ability to cope with harmful or potentially carcinogenic chemicals, and long-term use is linked to a reduction in natural and acquired immunity, increasing vulnerability to infections and neoplasms [7].

Discussion and Conclusion

There is already enough knowledge of the causes to eliminate all cancers in the world, and there is enough data to allow for early diagnosis and treatment of another third of cases. There is evidence that visual inspection as part of population screening programmed decreases mortality in high-risk patients with oral cancer; it is also possible to change lifestyles. Education of the general public and those at high risk, as well as a solid scientific foundation to address crucial facets of oral cancer and ongoing training for oral pathology healthcare professionals, can both play a role in reducing the red figures that have followed this disease in recent decades.

The quest for unique disease biomarkers should not be abandoned, and future studies should allow for advancement in identifying the susceptibility sector.

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