

# Head and Neck Squamous Cancer: A Comprehensive Overview of Incidence and Risk Factors

John Andrews\*

Department of Oncology, University of Milan, Milan, Italy

## Commentary

**Received:** 01-Jun-2023, Manuscript No. MCO-23-102426;

**Editor assigned:** 05-Jun-2023, PreQC No. MCO-23-102426(PQ);

**Reviewed:** 19-Jun-2023, QC No. MCO-23-102426; **Revised:** 26-Jun-2023, Manuscript No. MCO-23-102426(R); **Published:** 03-Jul-2023, DOI:

10.4172/medclinoncol.7.2.008

**\*For Correspondence:**

John Andrews, Department of Oncology, University of Milan, Milan, Italy

**E-mail:** JohnAndrew05@hotmail.it

**Citation:** Andrews J. Head and Neck Squamous Cancer: A Comprehensive Overview of Incidence and Risk Factors. Med Clin Oncol. 2023;7:008.

**Copyright:** © 2023 Andrews J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## DESCRIPTION

The worldwide incidence of head and neck squamous cancer is more than 500000 cases per year, and in the United States, it comprises approximately 4% to 5% of all new cancers and 2% of all cancer deaths. Most patients are older than 50 years, and incidence increase with age; the male-to-female ratio is 2.5:1. The age-adjusted incidence is higher among black men and stage-for-stage, survival among African American is lower overall than in whites. Approximately 34% of oral and pharyngeal cancers present as localized disease, 46% present as loco regional disease, and 10% present as metastatic disease.

## Research & Reviews: Medical and Clinical Oncology

Tobacco and alcohol use are major risk factors for developing cancer. Heavy alcohol consumption increases the risk twofold to six fold, whereas smoking increases the risk fivefold to 25-fold, depending on gender, race, and the amount of smoking. Together, the two factors can raise the risk by a factor of 15 to 40. Snuff and smokeless tobacco use are linked to oral cavity malignancies. Case-control studies reveal a nearly 50-fold relative risk of developing erythroplasia cancer in tissues exposed to snuff powder (such as the cheek and gum). Chewing betel with or without tobacco and slaked lime is linked to premalignant lesions and oral squamous malignancies in numerous areas of Asia and some areas of Africa.

The entire respiratory mucosa is affected by alcohol and tobacco use, which results in multifocal mucosal abnormalities known as "field cancerization." Patients with a prior history of head and neck, lung, or esophageal cancer run a 2% to 6% annual chance of developing a second case. Those who continue to smoke have the highest risk. Among people who have survived a first case of head and neck squamous carcinoma, second primary malignancies are a substantial cause of death.

Epstein-Barr Virus (EBV) has been detected in virtually all nonkeratinizing and undifferentiated nasopharyngeal cancers but less consistently in squamous nasopharyngeal cancers. Oral and oropharynx malignancies have been linked to the presence of the HPV.

Additionally, occupational exposure to nickel (nose and ethmoids), radium (antrum), mustard gas (sphenoid), chromium (sinuses and nose), leather (ethmoids and nasal cavity), and wood dust (ethmoids and nasal cavity), radiation exposure (thyroid and salivary gland cancer), EBV exposure (nasopharyngeal cancer), vitamin A deficiency, and marijuana use are all potential risk factors. Squamous head and neck cancer risk is elevated in the presence of immunosuppressive organ transplantation, DNA repair disorders, and these conditions.

The two main pieces of advice for preventing head and neck cancer are to quit smoking and drink in moderation. Leukoplakia or erythroplakia are the symptoms of premalignant lesions in the larynx, pharynx, and oral cavity. A leukoplakia without dysplasia has a 4% chance of developing into cancer. However, cancer can develop from up to 40% of severe dysplasias or erythroplasias. Retinoids can reversibly improve premalignant histology. In a modest randomized placebo-controlled trial, isotretinoin reduced the occurrence of secondary primary tumours in individuals being treated for head and neck cancer. A larger definitive randomized, placebo-controlled trial in patients with curatively treated stages I and II head and neck squamous cell carcinoma failed to find any benefit of 13-cis-retinoic acid in preventing second primary cancers or in survival. Euroscan, a large European chemoprevention trial that randomized patients with stage I to stage III non-small cell lung cancer or head and neck squamous cancer to either vitamin A or N-acetylcysteine, neither drug nor both drugs, also failed to find preventive benefit.

For people at risk for head and neck squamous cancer, there is currently no effective chemoprevention. Chemoprevention outside of a clinical trial is not advised and could be dangerous. Patients who were randomly assigned to Vitamin A plus B-carotene or B-carotene alone had a worse prognosis, according to two significant randomized chemoprevention trials for lung cancer.