



## CLINICOPATHOLOGICAL STUDY OF HEAD AND NECK CANCER.

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**ABSTRACT** **INTRODUCTION:** Head and neck cancers are one of the foremost common cancers worldwide and its incidence is reported to be increasing in resource-limited countries. Their definitive diagnosis is generally made by histological evaluation. Management and prognosis mostly rely on correct and timely identification.

**MATERIALS AND METHODS:** This was a retrospective study of histopathologically confirmed cases of head and neck cancers treated at Saveetha Medical College Hospital between August 2017 and October 2019.

**RESULTS:** A total of 50 patients were studied. The overall mean age of these malignancies was 49.65. The lesions involving the site of Oropharynx was the most frequent with a frequency of 40%. Cigarette smoking (76.6 %) and heavy alcohol consumption (69.9 %) were the most frequently identified risk factors for head and neck cancer.

**CONCLUSION:** This study has confirmed that carcinomas stay the foremost frequent cancers of the head and neck region.

**KEYWORDS :** Histopathology, Squamous Cell Carcinoma, Neuroendocrine Malignancy And Lymphoma.

### INTRODUCTION

Head and neck cancers are malignant neoplasms occurring in the oral cavity, paranasal sinuses, oropharynx, hypopharynx, nasopharynx, ear, scalp, nasal cavity and salivary glands<sup>[1]</sup>. They represent a serious public health concern throughout the planet and are a vital reason for morbidity and mortality.

Head and neck cancers are related to high morbidity as there are interference with important functions of life like respiratory, swallowing, speech, Hearing, vision, style and smell<sup>[2]</sup>. Their definitive identification is mostly created by histologic analysis. Management and prognosis mostly depend upon correct and timely identification.

The pattern of incidence of head and neck cancers varies between races and from one geographic region to a different. Excess tobacco and alcohol consumption are the foremost vital of the celebrated predisposing factors<sup>[3]</sup>. The association of those predisposing factors with head and neck cancers makes these cancers preventable and governable following early identification.

The management of cancers of the top and neck remains a serious challenge to medical practitioners due to the various nature of histologic patterns

(Sites of origin, explanation, and varied treatment modalities involving in depth, delicate, and generally recurrent surgeries, radiation therapy and chemotherapy).

Diverse histologic varieties of tumors are found within the head and neck region. Over ninety you look after head and neck cancers are of animal tissue origin, of that epithelial cell malignant neoplastic disease constitutes the best majority.

Alternative histologic sorts embrace lymphomas, blastomas, sarcomas and system tumor.

The management of head and neck cancer is advanced and needs a multidisciplinary approach involving medical oncologists, radiation oncologists, head and neck surgeons, radiologists, speech therapists, social employees, psychologists, plastic and/or constructive surgeons, dentists with specific interest and experience in head and neck cancer<sup>[5]</sup>.

The treatment of head and neck cancers varies consistent with the first website, growth stage, patient treatment preference, and practitioner's experience.

This study was designed to explain the clinicopathological pattern of head and neck cancer and highlight the difficult downside within the

management of this sickness in our native setting.

### MATERIALS AND METHODS

The study covers almost all patients of Saveetha Medical College and Hospital with histologically-confirmed cases of head and neck cancers throughout the quantity studied. Patients with incomplete information were excluded from the study.

The details of patients were retrieved from medical records department and histopathology laboratory. Information retrieved clathrate clinical presentation, anatomical site, tumor stage, histopathological type and grade, presence of metastasis (nodal, distant), treatment modalities, and outcome and follow-up. Head and neck cancer was diagnosed supported a histopathological examination. Reckoning on the placement, diagnostic assay specimens were obtained by excisional, incisional, operation or punch biopsies. Tissue specimens were submitted for histopathological examination. Frozen section study wasn't out there throughout the quantity of the study.

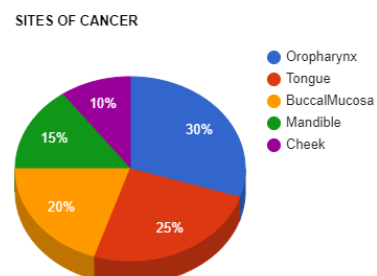
### RESULTS

Out of 80 patients of head and neck cancer studied 20% patients had squamous cell carcinoma, 25% patients had carcinoma of tongue, 15% patients had carcinoma of buccal mucosa, 10% patients had carcinoma of mandible, 10% patients had carcinoma of nasal cavity, 10% neuroendocrine malignancies and 10% had lymphomas.

The duration between disease onset and presentation for all the patients ranged from 3 to 24 months with 35 (43.75%) patients presenting within 6 months of onset of illness and 45 (56.25%) patients after 6 months. Smoking and alcohol consumption were reported by 55 (68.75%) and 58 (72.5%) patients, respectively. Smoking and alcohol consumption habit were more common in male patients than in females.

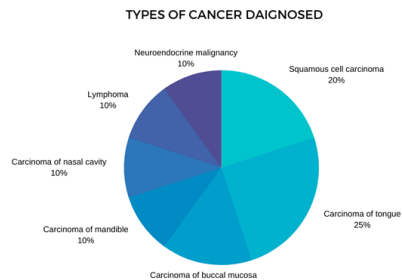
The oropharynx was the most frequent anatomical site for the head and neck cancers. Pie chart 1 shows the common sites of cancer.

**Pie chart 1: Common sites of cancer**



TNM staging was documented in only 60(42.8 %) patients. Of this, only 23 (4.1 %) patients were identified as being in early stages (TNM stage I–II) and 37 (95.9 %) patients were presented in advanced stages (stage III–IV). The most common histopathological type was carcinomas which afflicted (59.6 %) patients. Out of the carcinomas, 20% were squamous cell carcinoma, 25% were carcinoma of tongue, 15% were carcinoma of buccal mucosa, 10% were carcinoma of mandible, 10% were lymphomas and 10% were neuroendocrine malignancy.

**Pie chart 2 shows the types of cancer diagnosed among the 80 patients.**



Positive resection margins, stage of the tumor and presence of metastasis at the time of diagnosis and non-adherence to adjuvant therapy were the main predictors of local recurrence.

## DISCUSSION

Malignant tumors of the Head and neck represent one in all the foremost frequent malignancies worldwide with concerning [1] 1,000,000 new cases diagnosed annually [5], and their incidence seems to be increasing in developing countries [4].

Head and neck cancer has been reported in most studies to be a lot of rife in folks with low socioeconomic standing [12]. This finding is mirrored in our study during which the bulk of patients were farmers returning from rural spaces settled a substantial distance from the study area and most of them had either primary or no formal education and were out of work. This observation has associate degree implication on the accessibility of health care facilities and awareness of the illness.

In the study, the bulk of patients bestowed late with advanced stage of cancer that is to keep with alternative studies in developing countries. Late presentation in these countries could also be because of content, poverty, poor access to health services, and patients consulting ancient healers and victimisation ancient medicines.

The role of alcohol and tobacco in carcinogenesis of head and neck cancers is well documented. In our study, history of alcohol consumption and smoking was documented in and fifty five attempt to fifty eight of patients, severally. Victimisation alcohol and tobacco along will increase the danger of developing head and neck cancers even a lot of<sup>[10]</sup>. The joint result of alcohol and smoking once consumed along are potentiated and also the final relative risk is increased.

Pre-treatment workup of the head and neck cancers is vital to come to a decision on indication and extent of the treatment.

Despite recent advances within the diagnosing and treatment of head and neck cancer, there has been very little proof of improvement in 5-year survival rates over the previous couple of decades. During this study, the general 5-year survival rate of twenty.6 % is considerably low compared to the survival rate for patients with advanced (stage III–IV) head and neck cancers managed in developed countries that ranges from thirty to fifty%. Despite advances within the treatment of head and neck cancer, 15–50% of patients can develop continual illness.

The major limitation of this study is that the proven fact that data concerning some patients was incomplete in sight of the retrospective nature of the study and poor documentation may need introduced some bias in our findings.

The challenges known within the management of head and neck cancer in our setting ought to be addressed so as to deliver best look after these patients. Victimisation alcohol and tobacco along will increase the danger of developing head and neck cancers even a lot of other cancers.

The joint result of alcohol and smoking once consumed along are potentiated and also the final relative risk is increased.

## CONCLUSION

Head and neck cancers are currently common and show a trend towards a relative young age at diagnosing and also the majority are diagnosed with advanced stage cancer. Therefore public enlightenment, early diagnosing, and effective efficient treatment and follow-up are desperately required to boost outcomes of those patients in the environment. There's a requirement for the govt. to produce treatment funds for poor patients as a big range of patients were unable to complete treatment thanks to lack of funds. Institution of irradiation services at our centre is extremely suggested.

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