

# Distribution Of Head And Neck Cancers In Kashmir Valley

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## Abstract

Cancer of the head, face and neck is more common in Asians and is one of the commonest malignancies in India, accounting for 23% of all cancers in males and 6% in females. Head and neck cancer (HNC) includes tumours of the oral cavity, pharynx, and larynx. Other major HNCs include skin and salivary gland tumors including parotid tumors, skin malignancies, basal cell carcinoma, etc. The incidence of HNC increases with age; most patients being older than age 50. The major risk factor for development of HNC is tobacco use. The effect is both time and dose dependent. Use of tobacco and alcohol together increases the risk of oral cancer 15 times. Cancer patterns vary not only throughout the world but also between different population groups within the same country. Kashmir valley is distinct from rest of India as far as its geography, climate, social and dietary habits are concerned. The overwhelming population of valley is Muslims (90%), it is worth while to study the head and neck cancer profiles in the valley to gain an insight into its causation and over all profile. The absence of any study in this regard and high prevalence of head and neck cancers in this part of India has prompted us to take up this study.

## INTRODUCTION

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Asians and is one of the commonest malignancies in India, accounting for 23% of all cancers in males and 6% in females. Head and neck cancer (HNC) includes tumours of the oral cavity, pharynx, and larynx. Other major HNCs include skin and salivary gland tumors including parotid tumors, skin malignancies, basal cell carcinoma, etc. The incidence of HNC increases with age; most patients being older than age 50. The major risk factor for development of HNC is tobacco use. The effect is both time and dose dependent. Use of tobacco and alcohol together increases the risk of oral cancer 15 times.

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## MATERIALS AND METHODS

A retrospective study on prevalence of cancers in various

head and neck regions like nasal cavity, para-nasal sinuses, nasopharynx, larynx, oral cavity, salivary glands, thyroid and others was conducted in department of otorhinolaryngology. Head and neck surgery of SMHS Hospital Govt. Medical College Srinagar from 1997-2008. Only HPE confirmed cases were included.

## RESULTS

During the period of ten years a total of 329 cases of head and neck cancers were seen by the senior author in our department. The commonest H&N cancer seen was that of larynx (29.4%). Out of the total of 97 cases of cancers involving larynx 35 were poorly differentiated Squamous cell carcinoma. Males outnumbered females with a male female ratio of 5:1. The most common presenting symptom was hoarseness of voice followed by dysphagia.

Second most common tumour which presented to us was that involving the thyroid gland (19.7%). Most common thyroid tumour found was papillary carcinoma which is accounted for nearly 40% of all the cases. Males were outnumbered by females with a male female ratio of 1:3.3.

Tumours involving nose and PNS constituted 16.4% of all the tumours of H&N. Most common cancer was SCC. Male to female ratio was nearly equal (1.2:1). Most common presenting symptoms were nasal obstruction and epistaxis.

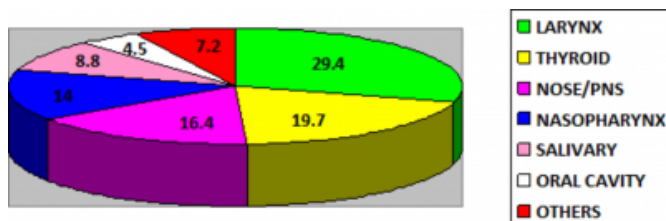
Tumours involving nasopharynx were 14% of all the tumours involving head and neck. Most common was angiofibroma, though it is a benign tumour but since it is locally invasive that is why it is included in this study. Male to female ratio seen was 3:1. the most common presenting symptom was epistaxis.

Tumour of salivary glands constituted 8.8% of all the tumours. Most commonly seen was pleomorphic adenoma of parotid. Male female ratio was 5:1.

Tumours involving oral cavity constituted only 4.5% of all the tumours . Most common oral tumour seen was squamous cell ca. of tongue. Male female ratio was 5.5:1.

**Figure 1**

PIE CHART DEPICTING DISTRIBUTION OF HEAD AND NECK CANCERS IN KASHMIR



## DISCUSSION

In our study most common tumour found was that involving the larynx/ hypo pharynx followed by thyroid tumours. The high incidence of laryngeal/hypopharyngeal may be attributed to the smoking habits of the people of valley. In Kashmir valley the mode of smoking is through hubble bubble (hukka) wherein the smoke is directly inhaled at a higher negative pressure.

**Figure 2**



This is in contrast to a similar study done by A. Bhattacharjee wherein he found oropharyngeal cancers were most common head and neck cancers in north east India. Oropharyngeal tumours constitute 28.6% of the total H&N tumours in north east but in our study it comprised only 4.5% of head and neck cancers. This may be due to increased consumption of pan masala (betel leaf & nut), tobacco and guthka chewing in north east India as compared to Kashmir valley.

The high incidence of thyroid malignancy especially papillary carcinoma can be attributed to the high incidence of goitre in the sub-Himalayan region which has been known as a iodine deficient zone.

## CONCLUSION

This study shows that distribution patterns of head and neck cancers is different in Kashmir valley as compared to the rest of India. Oral cancers are not that common in valley as compared to rest of India.

This study hopes to quantify and analyse the spectrum of HNCA and should help as a much needed population based study in his region.

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