

## Original Article

### Assessment of Neck Malignancy Patients Visited in Tertiary Care Hospital

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#### ABSTRACT

**Background:** Head and neck cancers (HNCA) are emerging as major health problems in India. Overall 57.5% of global head & neck cancers occur in Asia out of which around 30-35 % occur in India. The present study was conducted to assess the head & neck malignancy occurring in study population. **Materials & Methods:** The present study was conducted on 240 patients diagnosed with head & neck cancers. General information such as name, age, gender etc. was noted. Parameters such as site, location and predisposing factors etc. were recorded. **Results:** Out of 100 patients, males were 70 and females were 30. The difference was significant ( $P < 0.05$ ). Common sites were larynx in males (25) and females (6), oropharynx in males (10) and females (6), nasopharynx in males (9) and females (5), salivary glands in males (6) and females (4), thyroid in males (15) and females (7) and tongue in males (5) and females (2). The difference was significant ( $P < 0.05$ ). Common predisposing factors were tobacco in males (30) and females (10), alcohol in males (20) and females (8), viral in males (10) and females (7) and combination in males (10) and females (5). The difference was significant ( $P < 0.05$ ). **Conclusion:** Head & neck malignancy contribute to major malignancy of the body. Males had higher prevalence than females.

**Key words:** Head & neck, Malignancy.

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#### INTRODUCTION

Head and neck cancer is a collective term based on anatomical and topographic definitions for describing malignant tumors of the upper aerodigestive tract. This anatomical region comprises the oral cavity, the pharynx and the larynx. "Oral cancer" is one of the major subgroups of head and neck carcinomas; it involves the mucosa of the mouth (lips, base of tongue, tongue, floor of the mouth and the hard palate) and pharynx (oropharynx, hypopharynx and nasopharynx). About 40% of head and neck cancers occur in the oral cavity, 15% occur in the pharynx, 25% occur in the larynx and the remaining tumors occur in other sites (salivary glands and thyroid).<sup>1</sup>

The most frequent histological type, occurring in over 90% of cases, is the squamous cell carcinoma. Head and neck cancers (HNCA) are emerging as major health problems in India. Overall 57.5% of global head & neck cancers occur in Asia out of which around 30-35 % occur in India.<sup>2</sup> Oral cancers contribute for around 9.4%<sup>3</sup>. HNCA is the sixth

most common disease in males and this disease is responsible for many deaths worldwide; it is the sixth cause of death by cancer. Each year approximately 200 thousand new cases of head and neck cancer are diagnosed worldwide. The estimated mortality rate is approximately 12,300 deaths per year;<sup>6</sup> the survival rate is 40 to 50% for diagnosed patients.<sup>3</sup>

The burden of cancer in India is on rise due to increase in longevity of the growing population. HNCA in advanced stages can often cause varying degrees of structural and functional deformities depending on the site, size and pattern of the spread. There is always a decrease in the quality of life which can induce additional mutilation. Over 2,00,000 HNCA occur every year in India. Nearly 80,000 are diagnosed every year in the country. Most of the HNCA is cause due to Betel Nut chewing. Human papilloma virus is also one of the cause for HNCA in the present decade.<sup>4</sup> The present study was conducted to assess the head & neck malignancy occurring in study population.

**MATERIALS & METHODS**

We planned the present study in the department of ENT, Govt. S.K. Hospital, Sikar, Rajasthan, India, and it included evaluation of Neck Malignancy Patients Visited in Tertiary Care Hospital. Ethical approval was obtained from institutional ethical committee and written consent was obtained after explaining in detail the entire research protocol. A total of 100 patients with head and neck cancer were included in the present study. Out of 100 patients, 70 were males and the remaining 30 were females. Complete demographic details of all the patients were recorded. We also recorded the clinical details of the patients, including the site of cancer, size of cancer, its duration etc. various other parameters including predisposing factors etc. were also recorded. Results thus obtained were subjected to statistical analysis using chi- square test. P value less than 0.05 was considered significant.

**RESULTS**

Table I shows that out of 100 patients, males were 70 and females were 30. The difference was significant (P< 0.05).Graph I shows that common sites were larynx in

males (25) and females (6), oropharynx in males (10) and females (6), nasopharynx in males (9) and females (5), salivary glands in males (6) and females (4), thyroid in males (15) and females (7) and tongue in males (5) and females (2). The difference was significant (P< 0.05).Graph II shows that common predisposing factors were tobacco in males (30) and females (10), alcohol in males (20) and females (8), viral in males (10) and females (7) and combination in males (10) and females (5). The difference was significant (P< 0.05).

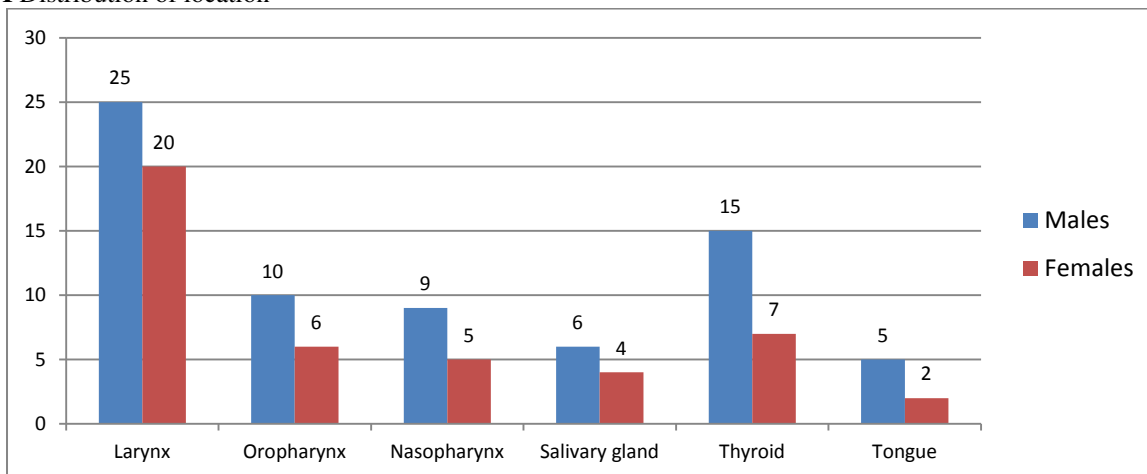
**Table I** Distribution of patientsN(100)

Males	Females
70	30

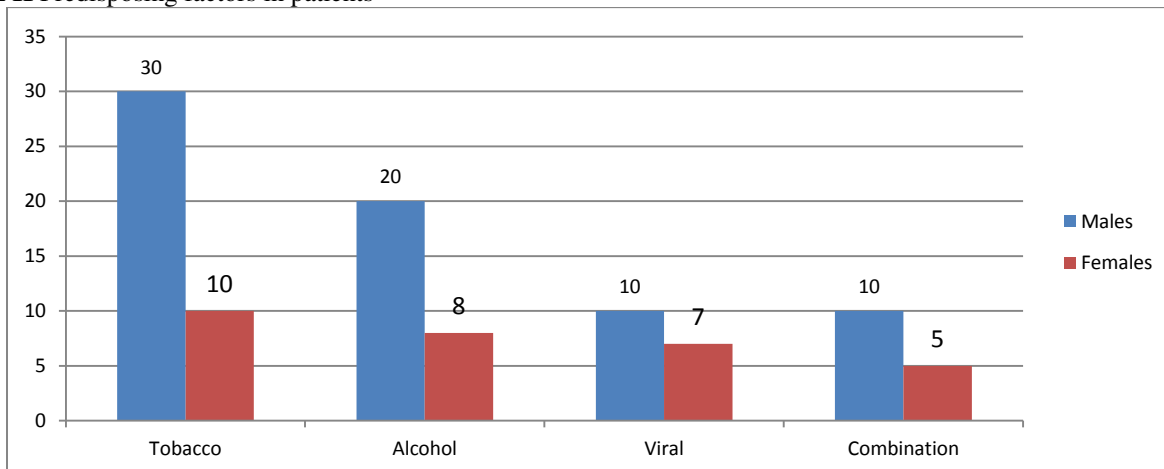
**Table 2:** Predisposing factors in patients

	Males	Females
Tobacco	30	10
Alcohol	20	8
Viral	10	7
Combination	10	5

**Graph I** Distribution of location



**Graph II** Predisposing factors in patients



## DISCUSSION

Most of HNCA and mortality is due to predisposition linked to certain genetic mutations and also due to exposure to carcinogenic lifestyle behaviours. Tobacco smoking in the form of cigarettes, bidis, cigars, reverse smoking which are more common in northern Maharashtra is a major contributing factor for the prevalence of HNCA. Studies shows around 57% of all men and 11% women in India between 15 to 50 years use some form of tobacco. Results from world health survey and global youth tobacco survey also reveals that 10 to 20% of students in 8th to 10th grades currently use tobacco in some form.<sup>5</sup>

In present study, out of 100 patients, males were 70 and females were 30. In a study by Sharma et al<sup>6</sup>, total of 427 patients consulted in the hospital in the period from 2000 to 2005 were investigated. The variables analyzed were age, gender, occupation, skin color, tobacco and alcohol consumption, primary site of the tumor, clinical staging, degree of histological differentiation and outcome. Prevalence was found among men (86%), white color (90%), smokers (83.37%), and alcoholics (65.80%); the average age was 61 years, 24.25% of men were farmers and 60% of women, housekeepers. Primary site of tumor was usually in the oral cavity (35.37%), with histological squamous cell. The incidence of deaths was 164.

We found that common sites were larynx in males (25) and females (6), oropharynx in males (10) and females (6), nasopharynx in males (9) and females (5), salivary glands in males (6) and females (4), thyroid in males (15) and females (7) and tongue in males (5) and females (2). The difference was significant ( $P < 0.05$ ). This is in agreement with Mittal et al.<sup>7</sup>

Lio et al<sup>8</sup> in their study found incidence of Head & Neck cancer cases in 7 years study was around 14.03% of other total body malignancies. Males are more affected by Head & Neck cancer for around 82.01% than females contributing which is around 17.9%. Oral cavity malignancies contribute around 76.6% out of all head & neck cancer cases. Tongue cancers are more commonly affected which is around 33.4% followed by Buccal mucosa which was 29.77%. The mortality rate was high in buccal mucosa (32.35%) followed by tongue (27.4%).

The strong association of oral cavity and laryngeal cancers with tobacco use is well recognized. Epidemiological studies show that oral cavity is affected with 71.9% of all HNCA cases followed by larynx with 11.55% cases. Studies also reveal the incidence of developing cancer is 5 to 9 times more in smokers than non smokers. Carcinogenic tobacco is other major factor in HNCA. Most of the females are exposed to it in India. Varied precancerous lesions and conditions are caused due to betel nut/ quid chewing.<sup>9</sup> Regular alcohol consumption is associated with 2 to 3 fold higher in drinkers than among non drinkers.

## CONCLUSION

Head & neck malignancy contribute to major malignancy of the body. Males had higher prevalence than females.

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