

Common Malignant Tumour in Oral and Oropharyngeal Lesion

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ABSTRACT

Background with Objective: A variety of non-neoplastic and neoplastic lesions can involve the oral cavity and oropharyngeal region. In 1971 WHO classified oral lesions into malignant tumours, benign tumours and tumor like lesions. The aim of this study was to assess the common types of malignant tumor in oral and oropharyngeal lesion.

Methods: This descriptive cross-sectional study was carried out among 98 patients presenting with malignant tumor in oral cavity and oropharynx at Pathology department for histopathology, Dhaka Medical College Hospital, Dhaka, from January 2016 to December 2017. Purposive sampling method was followed. Statistical analysis of the results were obtained by using window based computer software devised with Statistical Packages for Social Sciences (SPSS-20.1).

Results: Female patients (55%) suffering from more malignant tumor in oral cavity than male patients (45%). Most of the patients belonged to 41-50 years (32%). 99% patients had multiple personal habits while remaining 1% patient reported no personal habit. The most common personal habit is betel leaf and nut with jorda, sad and gul followed by tobacco smoking. Most common malignant tumors were squamous cell carcinoma – G-I (58%) and squamous cell carcinoma – G-II (31%) in oral and oropharyngeal lesion. Most of the patients (81.6%) presented with ulceration and 18.4% patients had growth/mass. Only 27.55% patients had history of pain in tumor. Buccal mucosa were the common site (42%) for malignant tumor in oral and oropharyngeal region.

Conclusion: Squamous cell carcinoma G-I were more common malignant tumor in oral and oropharyngeal lesion.

KEYWORDS: Malignant tumor, Oral and oropharyngeal lesion, Squamous cell carcinoma.

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INTRODUCTION

Oral cancers are malignant lesions occurring in the oral cavity that include squamous cell carcinomas, salivary gland and odontogenic neoplasms. The majority (84-97%) of malignant lesions are oral squamous cell carcinoma which arises from pre-existing “potentially malignant” lesions or more often from normal appearing epithelium¹. There is a wide variation in the incidence and mortality rates of oral cancer in different regions around the world. In the developing world oral cancer is the third most common cancer after stomach and cervical

cancer². The aetiological factors implicated in oral cancer are tobacco use, alcohol consumption, chewing of betel quid and betel leaf, shada pata, gul etc. Others include diet and nutritional status, chronic candida infection, viral infection, and immune deficiency. The chewing of betel quid is very common in South-East Asia, the Indian subcontinent, including Bangladesh. The types of tobacco they chewed mostly are jorda and shada. This finding are similar to our national statistics, where tobacco smoking for ladies is not a custom till now and most of the females consume smokeless tobacco only

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(Bangladesh Bureau of Statistic, 2011, Cross Reference). Oropharyngeal cancer is the 8th most common cancer worldwide ³. The lesions of these areas have a clinical appearance that is similar to cancers found in the oral cavity proper. Unfortunately, such tumours are typically larger and more advanced at the time of discovery than are more anterior cancers of the oral cavity ⁴. Prognosis of oral cancer differs significantly between specific oral locations. For example, lip cancer having a much better prognosis than at the base of tongue or on the gingiva. Prognosis of the intraoral cancer is generally poor with a five-year survival <50 percent. Local recurrences as well as lymph node metastases occur in a significant percentage of patients, while distant metastases are less frequent ⁵. Proper management of patients with an oral lesion starts with accurate diagnosis. Among the various methods available for diagnosis of oral lesions, the histopathological examination is regarded as the Gold Standard ⁶.

MATERIALS & METHOD

This descriptive cross-sectional study was carried out among 98 patients presenting with malignant tumor in oral cavity and oropharynx at Pathology department for histopathology, Dhaka Medical College Hospital, Dhaka, from January 2016 to December 2017. Purposive sampling method was followed. The collected data were entered into the computer and analyzed by using SPSS (version 20.1) to assess the common types of malignant tumor in oral and oropharyngeal lesion. The study was approved by the institutional ethical committee.

RESULTS

Female patients (55%) suffering from more malignant tumor in oral cavity than male patients (45%). Most of the patients belonged to 41-50 years (32%) followed by 51-60 years (31%) (Table 1).

Table 1: Socio-demographic Characteristics of the study population (n=98)

Parameter	Number	percentage
Gender		
Male	44	45%
Female	54	55%
Age		
11-20 years	1	1%
21-30 years	0	0%
31-40 years	7	7%
41-50 years	31	32%
51-60 years	30	31%
61-70 years	20	20%
71-80 years	7	7%
81-90 years	2	2%

Out of a total 98 cases, 97 (99%) patients had multiple personal habits while remaining 1 (1%) patient reported no personal habit. (Figure 1)

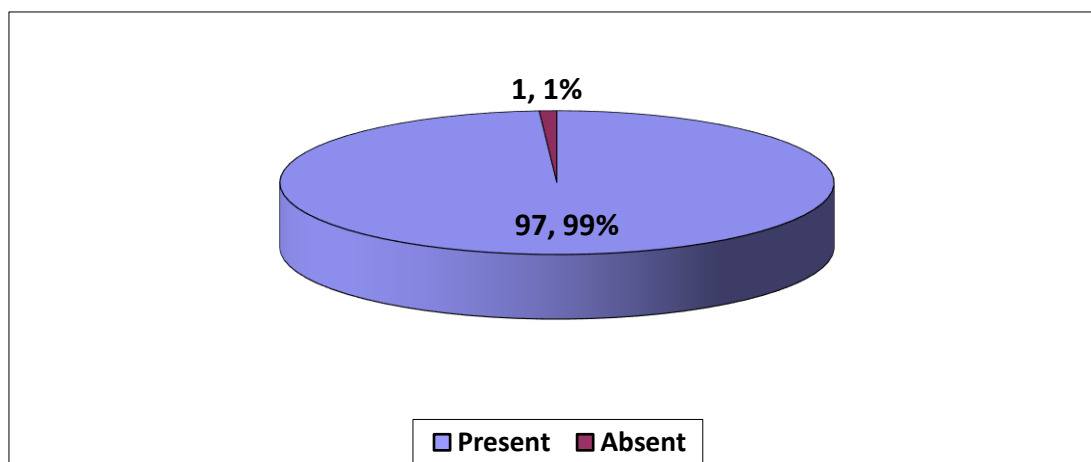


Figure 1: Pie chart of distribution of the patients according to presence of personal habits.

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Many patients had more than one personal habit. The most common personal habit is betel leaf and nut with jorda, sad and gul followed by tobacco smoking. (Table 2)

Table 2: Personal habits of the study population (n=98)

Addiction	Number
Betel Leaf and nut with jorda/Shada/Gul	103
Tobacco Smoking	44
Alcohol consumption	3
No addiction	1

Maximum malignant tumors were squamous cell carcinoma – G-I (58%) and squamous cell carcinoma – G-II (31%). (Table 3)

Table 3: Type of malignant Tumor in oral and oropharyngeal lesion (n=98)

Type of malignant tumor	Number	percentage
Dermatofibrosarcoma protruberance	1	1%
Mucoepidermoid Carcinoma	1	1%
Polymorphous low grade adenocarcinoma	1	1%
Squamous cell carcinoma –G-I	57	58%
Squamous cell carcinoma –G-II	30	31%
Squamous cell carcinoma – G-III	5	5%
Verrucous type squamous cell carcinoma	3	3%
Total	98	100%

Most of the patients (81.6%) presented with ulceration and 18.4% patients had growth/mass. Only 27.55% patients had history of pain in tumor. (Table 4)

Table 4: Distribution of patients as per nature of lesions (n=98)

parameter	Number	percentage
Nature of lesion		
Growth/ Mass	18	18.4%
Ulceration	80	81.6 %
Clinical Symptoms		
Painful	27	27.55%
painless	71	72.44%

Buccal mucosae were the common site (42%) for malignant tumor in oral and oropharyngeal region. (Table 4)

Table 4: Sub-site of malignant tumors of oral and oropharyngeal region (n=98)

Site	Number	percentage
Alveolar mucosa	11	11%
Buccal mucosa	41	42%
Tongue	10	10%
Maxilla	2	2%
Hard palate	3	3%
Lip	13	13%

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Soft palate	7	7%
Retromolar area	9	9%
Gingiva	1	1%
Floor of the mouth	1	1%
Total	98	100%

DISCUSSION

The gender distribution shows higher number of females (55%) cases, though the difference with male was not significant. The finding was similar to Modi et al. (2013) study⁷. The contributing factor for female predominance in our study may be due to social and cultural practice of “pan” chewing habits. In our study buccal mucosa was most common site (42%) of malignant lesions which was concordant with the studies of Ahluwalia et al., 2001; and Sankaranarayanan et al., 2005 studies^{8,9}. Squamous cell carcinoma with varying differentiation ranked first in this study among the histopathological types of malignant tumours. In present study well differentiated squamous cell carcinoma was most common histologic variety (58%). It was in concordance with the studies done by Patel and Pandya, (2004) and Ahluwalia et al., (2001)^{10,8}. Majority of malignant lesions (80 out of 98) were also presented with ulcer in our study. In a study done by Gupta et al. (2016) found majority of the malignant lesions (115 out of 165 cases) presented with growth which is not similar with our finding¹³.

CONCLUSION

squamous cell carcinoma – G-I and squamous cell carcinoma – G-II were more common malignant tumor in oral and oropharyngeal lesion. Their occurrence can be limited by early detection and elimination of harmful habits.

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CONFLICT OF INTEREST

Authors declare no conflict of interest.

REFERENCES

- I. Bhurgri, Y., Bhurgri, A., Hussainy, A.S., Usman, A., Faridi, N., Malik, J., Zaidi, Z.A., et al. 2003. Cancer of the oral cavity and pharynx in Karachi-identification of potential risk factors. *Asian Pacific Journal of Cancer Prevention*, 4(2), pp.125-130.
- II. Mehboob, B., Khan, E. and Khan, M., 2011. Awareness about oral cancer among non medical university students of Peshawar. *Pakistan Oral & Dental Journal*, 31(2).
- III. Petersen, P.E., 2009. Global policy for improvement of oral health in the 21st century—implications to oral health research of World Health Assembly 2007, World Health Organization. *Community dentistry and oral epidemiology*, 37(1), pp.1-8.
- IV. Neville, B.W. and Damm, D.D., Allen, C.M., et al. 2002. Oral maxillofacial pathology. 2nd. Philadelphia: WB Saunders, pp. 316-376.
- V. Mehrotra, R., Pandya, S., Chaudhary, A.K., Kumar, M. and Singh, M., 2008. Prevalence of oral pre-malignant and malignant lesions at a tertiary level hospital in Allahabad, India. *Asian Pac J Cancer Prev*, 9(2), pp.263-5.
- VI. Poh, C.F., Ng, S., Berean, K.W., Williams, P.M., Rosin, M.P. and Zhang, L., 2008. Biopsy and histopathologic diagnosis of oral premalignant and malignant lesions. *Journal of the Canadian Dental Association*, 74(3), pp. 283-88.
- VII. Modi, D., Laishram, R.S., Sharma, L.D.C. and Debnath, K., 2013. Pattern of oral cavity lesions in a tertiary care hospital in Manipur, India. *Journal of Medical Society*, 27(3), p.199.
- VIII. Ahluwalia, H., Gupta, S.C., Singh, M., Mishra, V., Singh, P.A. and Walia, D.K., 2001. Spectrum of head-neck cancers at Allahabad. *Indian Journal of Otolaryngology and Head & Neck Surgery*, 53(1), pp.16-21.
- IX. Sankaranarayanan, R., Ramadas, K., Thomas, G., Muwonge, R., Thara, S., Mathew, B., et al. 2005. Effect of screening on oral cancer mortality in Kerala, India: a cluster-randomised controlled trial. *The Lancet*, 365(9475), pp.1927-1933.
- X. Patel, M.M. and Pandya, A.N., 2004. Relationship of oral cancer with age, sex, site distribution and habits. *Indian journal of pathology & microbiology*, 47(2), pp.195-197.
- XI. Gupta, M., Choudhary, H., Gupta, N. and Gupta, A., 2016. Histopathological study of neoplastic lesions of oral cavity and oropharynx. *International Journal of Research in Medical Sciences*, 4(5), pp.1506-1510.