

A STUDY ON PROFILE OF PATIENTS WITH ORAL CANCER

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ABSTRACT

The majority of tongue cancers occur in the middle third of the lateral margins extending in the course of disease on to the ventral aspect and floor of mouth. Often the growth is exophytic with areas of ulceration Detailed history was recorded in a proforma, regarding age, sex, presenting complaints, habits of chewing tobacco, pan and gutkha, habit of smoking and consumption of alcohol. Thorough examination of oral cavity was done and site of growth was noted. Majority of patients had squamous cell carcinoma (97%) and only 3 patients had a variety of adenoid cystic carcinoma (3%). No difference is observed in gender suffering with oral cavity cancer.

INTRODUCTION

The oral cavity extends from the vermilion border of the lip to the hard palate/soft palate junction superiorly, to circumvallate papillae inferiorly and to the anterior tonsillar pillars laterally. The slit like space between the lips and cheeks and teeth/gingivae is the vestibule of the mouth. The space inside the teeth and gums is the oral cavity proper. The floor is formed by the mylohyoid muscle and the roof is formed by the hard palate [1].

Oral cancers generally refer to squamous cell carcinoma of oral mucosal origin. More than 90% of cancers of oral cavity are squamous cell carcinomas. Squamous cell carcinomas are described as either exophytic or ulcerative or a mixture of both ie, ulceroproliferative [2].

The majority of tongue cancers occur in the middle third of the lateral margins extending in the course of disease on to the ventral aspect and floor of mouth. Often the growth is exophytic with areas of ulceration. It may occur as an ulcer in the depths of a fissure or as an area of superficial ulceration with infiltration into the

underlying muscle. Excessive salivation, Foetor oris, Ankyloglossia are the other symptoms. Pain is a late symptom due to involvement of lingual nerve. Lymph node metastasis is common and present as lump in the neck [3].

Biopsy plays a main diagnostic tool in oral malignancies. It is always done on any doubtful or obvious malignant lesions of the oral cavity. Positive biopsy confirms malignancy but a negative malignancy does not exclude malignancy [3].

METHODOLOGY

This is a descriptive study conducted at for eighteen months and a total of 100 patients having malignant neoplasm of lip, cheek, alveolus, tongue, floor of mouth and hard palate were included using purposive sampling technique.

No specific criteria were used among the oral cancers. Detailed history was recorded in a proforma, regarding age, sex, presenting complaints, habits of chewing tobacco, pan and gutkha, habit of smoking and consumption of alcohol. Thorough examination of oral cavity was done and site of growth was noted. A through clinical examination of the neck and other parts of the body was also done and staged in TNM staging.

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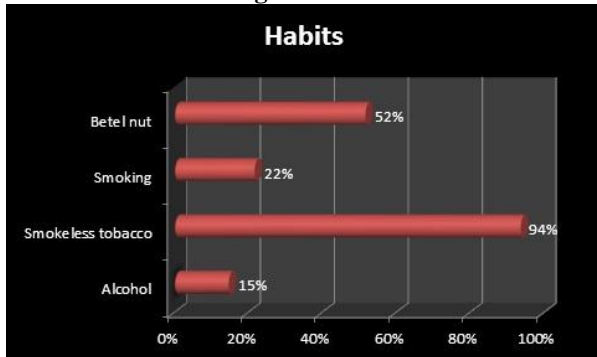
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All patients underwent routine baseline investigations like urine for albumin and sugar, complete hemogram, blood for urea and sugar, serum for creatinine and bilirubin, chest x ray and ECG. All the patients were

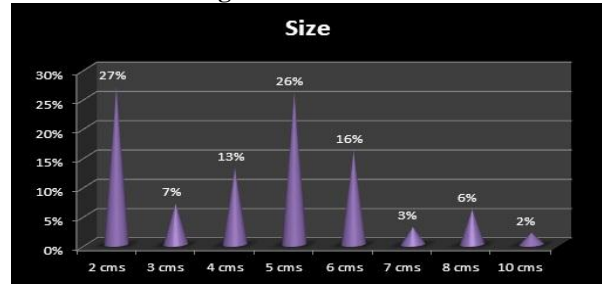
subjected to wedge biopsy of the lesion and histopathology examination of the specimen was carried out to assess the native and histological grading of the tumour.

Fig 1. Habits



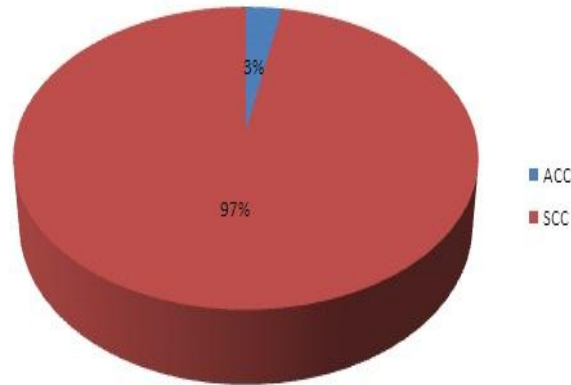
History of substance abuse revealed that 94% of patients were using smokeless tobacco, 52% were using betel nut, 22% were smokers and 15% were alcoholics

Fig 2. Size of Lesion



Considering the largest diameter of oral cavity lesion, 27% of patients had a size of 2 cms lesion, 26% had a lesion of size 5 cms, 13% of patient had a lesion of 4 cms, and 6% of patients had a lesion of 8 cms. Only two patients had lesion of size 10 cms.

Fig 3. Type of cancer



Majority of patients had squamous cell carcinoma (97%) and only 3 patients had a variety of adenoid cystic carcinoma(3%)

RESULTS

Table 1. Age sex wise distribution of study subjects

Age group	Gender		Total
	Male	Female	
20 – 29 years	03 (06.1%)	03 (05.9%)	06 (06%)
30 – 39 years	05 (10.2%)	09 (17.6%)	14 (14%)
40 – 49 years	18 (36.7%)	18 (35.3%)	36 (36%)
50 – 59 years	23 (46.9%)	08 (15.7%)	31 (31%)
60 – 69 years	00	10 (19.6%)	10 (10%)
70 – 79 years	00	03 (05.9%)	03 (03%)
Total	49 (100%)	51 (100%)	100 (100%)

Chi square value – 21.3 df- 5 p value-0.001

Among males, higher proportion of patients were in the age group of 50 – 59 years (46.9%) followed by 40 – 49 years(36.7%), 30 – 39 years(10.2%) and 20 – 29 years(06.1%) whereas among females, higher proportion of patients were in the age group of 40 – 49 years (35.3%) followed by 60 – 69 years(19.6%), 30 – 39 years(17.6%) and 50 – 59 years(15.7%) and 20 – 29 years (5.9%)

The relation between age and gender is found to be statistically significant.



Table 2. Distribution based on duration of oral cancer at presentation

Duration	Frequency	Percentage
Up to 6 months	80	80%
7 – 12 months	13	13%
13 – 18 months	03	03%
19 – 24 months	04	04%
Total	100	100%

Majority of patients had a history of duration of cancer of 6 months i.e 80% and 20% of patients had a history of duration of cancer between 7 – 24 months at presentation.

DISCUSSION

In this study, oral cavity lesion was more commonly found in the age group of 40 – 49 years (36%), followed by 50 – 59 years (31%), 30 – 39 years (14%), 60 – 69 years (10%) and 70 – 79 years (3%). It was observed that age group 40 – 59 years comprised of 67% of total cases. Similar to this, a study by Patel MM et al[4,5] reported 12.9% of oral and oropharyngeal malignancies below 35 years age, 23.8% between 35 and 45, and 63.3% cases over 45 years of age.

In a study by Mehrotra Ravi et al [6], the maximum incidence was in 50-59 years age range Iype EM et al [7] found 2.8% of oral cancer in young patients below 35 years of age. Dhar PK et al [8] reported maximum incidence (35.7%) in the age range of 51-60 years.

According to Dias et al [9], the average age of diagnosis of oral malignancy was 62 years, with a standard deviation of 12 years. Brandizzi D et al[10] reported the mean age of oral malignancy to be 62 years, with a range of 19 to 95 years.

According to Wahid A et al[11] in Pakistan, the commonest age group affected in oral cavity squamous cell carcinoma was 41-50 years (38%), followed by 51-60 years (34%).

This study comprised both males and females almost in equal proportion i.e Males were 49% and females were 51% of total study subjects. But contradicting to this, other studies have difference in gender with oral cancer.

In a study by Patel MM et al [5] 75% of patients were males. Mehrotra Ravi et al[6] from Allahabad, India reported a male: female ratio of 3.27:1. Iype EM et al[7] from Trivendrum, Kerala found a higher preponderance in males (70%) compared to females (30%). Dhar PK et

al [8], in their study reported that 68.3% of patients were males. . In a hospital based study by Khandekar SP et al[12] 61.3% of patients were males. Durazzo MD et al[13] from Brazil reported 31.8% cases were females. Dias et al[9] from Portugal reported a male: female ratio of 4:1. Brandizzi D et al [10] from Argentina reported 55% oral malignancies in males.

The delay in diagnosis of oral squamous cell carcinoma could be correlated to patient delay (in looking for professional care), professional delay (in reading a diagnosis), or both and presumably has some bearing on the size of the tumor presented. The time interval between the onset of symptoms and the start of treatment depends on various factors such as patient behavior, clinical course of the illness and the quality of the health services. A study in Cordoba, Argentina, reported that, both patients and professionals were responsible for the delay in diagnosis. The study indicated that the professional delay was the most associated variable to the stage of tumor [14]. In our study maximum number, i.e., 80 patients (80%) presented within 6 months of onset of symptoms. This can be attributed to the fact that because of poverty, illiteracy, and possibly resorting to home remedies, all leading to delay by the patients[15]. Most of the patients have to earn their living by daily wages and the loss of working day's means a loss of wages. Hence, these patients refer late as compared to western data [16].

CONCLUSION

- Oral cavity cancer more commonly affects age more than forty years but younger age group are not completely spared
- The relation between age and gender is found to be statistically significant

REFERENCES

1. Gray's Anatomy: The Anatomical Basis of Clinical Practice (40th ed.), Churchill Livingstone, Elsevier, 2008, ISBN 978-0-443-06684-9
2. Silverman S Jr, Gorsky M. (1990). Epidemiologic and demographic update in oral cancer: California and national data--1973 to 1985. *J Am Dent Assoc*, 120, 495-9.
3. Sinha, P.K. Kasar, R. Tiwari, A. Sharma.(2006). Cancer Morbidity and Mortality Profile in Jabalpur -A Hospital Based Study. *Indian Journal of Community Medicine*, 31(1), 28-29.
4. Patel MM and Pandya AN. (2004). Relationship of oral cancer with age, sex, site distribution and habits. *Indian J Pathol Microbiol*, 47(2), 195-197.
5. Mehrotra R, Singh M, Kumar D, Pandey AN, Gupta RK, Sinha US. (2003). Age specific incidence rate and pathological spectrum of oral cancer in Allahabad. *Indian J MedSci*, 57 (9), 400-4.



6. Iype EM, Pandey M, Mathew A, Thomas G, Sebastian P, Nair MK. (2001). Oral cancer among patients under the age of 35 years. *J postgrad Med*, 47(3), 171-6.
7. Dhar PK, Rao TM, Nair NS et al. (2000). Identification of risk factors for specific subsites within the oral and oropharyngeal region- a study of 647 cancer patients. *Indian J cancer*, 37, 114-122.
8. Dias GS, Almeida AP. (2007). A histological and clinical study on oral cancer: Descriptive analyses of 365 cases. *Med Oral Patol Oral Cir Bucal*, 12(7), 474-8.
9. Brandizzi D, Gandolfo M, Velazco ML, Cabrini RL, Lanfranchi HE. (2008) Clinical features and evolution of oral cancer: A study of 274 cases in Buenos Aires, Argentina. *Med Oral Patol Oral Cir Bucal*, 13(9), 544-8.
10. Wahid A, Ahmad S, Sajjad M. (2005). Pattern of carcinoma of oral cavity reporting at dental department of Ayub Medical college. *Journal of Ayub Medical College*, 17(1), 18-23.
11. Khandekar SP, Bagdey PS, Tiwari RR. (2006). Oral cancer and some epidemiological factors: a hospital based study. *Indian Journal of Community Medicine*, 31, 3
12. Durazzo MD, Araujo CEN, Brandao Neto JS, Potenza AS, Costa P et al. (2002). Clinical and epidemiological features of oral cancer in a medical school teaching hospital from 1994 to 2002: increasing incidence in women, predominance of advanced local disease, and low incidence of neck metastases. *Clinics*, 60(4), 293-8.
13. Babu G.K. (2001). Oral cancer in India. *Semin. Oncol*, 28(2), 169-73.
14. Kerdpon D, Sriplung H. (2001). Factors related to delay in diagnosis of oral squamous cell carcinoma in southern Thailand. *Oral Oncol*, 37, 127-31.
15. Ozlu T, Bulbul Y, Oztuna F, Can G. (2004). Time course from first symptom to the treatment of lung cancer in the Eastern Black Sea Region of Turkey. *Med Princ Pract*, 13, 211-4.

