



TO STUDY DEMOGRAPHIC PROFILE AND CLINICAL PRESENTATION OF SQUAMOUS CELL CARCINOMA OF ORAL CAVITY

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ABSTRACT In developing countries, a high proportion of patients with oral cancer are from lower socioeconomic classes. This high proportion is clearly associated with difficulties in accessing the health care system. Hence, the aim of this study is to assess the demographic profile and clinical presentation of oral cancer patients. **Objectives:** To study the demographic profile and clinical presentation of oral squamous cell carcinoma. **Methods:** A prospective observational study was carried out in 69 patients of oral squamous cell carcinoma in age group of 26-77 years (54 males and 15 females with mean age being 51.95 ± 10.36 years). All the patients underwent through clinical examination, palpation of oral lesion, other relevant investigation were done like incisional biopsy from lesions, contrast enhanced CT scan. socioeconomic status were assessed using modified B.G. Prasad scale. **Results:** Out of 69 patients of oral squamous cell carcinoma, 54(78.26%) were males and 15 (21.73%) were females with male to female ratio of 3.6:1. Most of the patients (28.98%) belonged to the 41 – 50 years age group followed by 21.73% patients belonged to 51-60 years of age group. Most of the patients belonged to lower class 49.27% (n=34) and lower middle class 28.98% (n=20) according to modified B.G. Prasad socio-economic scale. Patients are mostly tobacco chewer 62.31% (n=43) followed by betel nut chewer 10.14% (n=07).in the oral cavity tongue was the major subsite involved. **Conclusion:** Delayed presentation to health care center, limited accessibility to health care services as well as prevalence of addictions within patients increase the chances of oral malignancy as well as distant metastasis.

KEYWORDS : oral SCC, demographic profile, tobacco addiction, clinical presentation.

INTRODUCTION

The oral cavity is lined by stratified squamous epithelium of varying degrees of keratinization. Primary tumours of the oral cavity may be derived from the mucosa, salivary glands, neurovascular tissues, bone or dental tissues. Over 90% of tumours of the oral cavity are squamous cell carcinomas. Globally over 300,000 people are diagnosed with oral cancer each year, it being the eighth most common malignancy.¹

Oral cancer is more common in males, who usually present in the 6th and 7th decade although the incidence of oral cancer in young people seems to be increasing.^{2,3} Tobacco and alcohol consumption are the major aetiological factors in the development of oral cancer,⁴ oral cancer being considered largely preventable.

World is heading towards various types of noncommunicable diseases, which are also known as modern epidemics. Among these modern epidemics cancer is the second commonest cause of mortality in developed countries. In developing countries, oral cancer is among the ten commonest cause of mortality.⁵

India has one of the highest rates of oral cancer in the world; accounting for one third of the total cancers and unfortunately this figures continue to rise. According to World Health Organisation, 40% of the oral cancers which were diagnosed worldwide occurs in India, Pakistan, Bangladesh and Srilanka.⁶

In India, approximately 30- 40% of all cancer cases are oral cancers, which are much higher as compared to Western world.⁷ As estimated by WHO, 90% of oral cancer cases among Indian men are attributable to tobacco consumption.⁸ present study was carried out to study the demographic profile and clinical presentation of the oral squamous cell carcinoma.

MATERIALS AND METHODS

- **STUDY DESIGN:** This is a Prospective observational study done on the patients attending the out-patient department or admitted under ENT with suspicion for oral malignancy.
- **STUDY AREA:** This study was conducted at our tertiary care

hospital in a moderately populated city.

- **STUDY DURATION:** The study was conducted for a duration of 18 months from 01/01/2021 to 30/06/2022.
- **STUDY POPULATION:** This is a Prospective observational study on the patients of all age groups attending the ENT OPD or admitted under ENT with suspicion for malignant lesion of oral cavity.
- **STUDY SIZE:** All the patients of malignant lesions of oral cavity attending ENT outpatient department, inpatient department during study period.

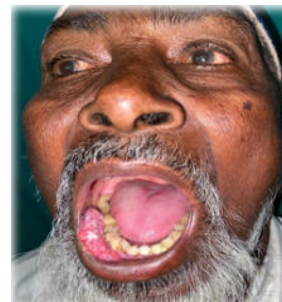


Figure 1: squamous cell carcinoma of buccal mucosa.

This study was intended to assess the demographic profile and clinical presentation of oral squamous cell carcinoma after correlating the history, clinical examination findings, various investigation results, USG neck, FNAC and excision biopsy of enlarged cervical lymph node, incisional biopsy of lesion. Relevant specific investigations like X-Ray, CECT- skullbase to diaphragm were done. After taking informed consent from each patient the incisional biopsy was carried out, according to the TNM classification of the American Joint Committee for cancer staging and end results reporting done.⁵ This classification includes four stages depending on primary tumor,

regional lymph node involvement and distant metastasis. Histopathological staging was done by Border's grading system.

RESULTS:-

The study sample consisted of 69 patients with oral squamous cell carcinoma. Table 1 shows the distribution of patients according to the demographic profile. Among the study subjects, 54(78.26%) were males and 15 (21.73%) were females with male to female ratio of 3.6:1. The age group of the patients ranged from 26 to 77 years. 28.98% patients belonged to the 41 – 50 years age group followed by 21.73% patients belonged to 51-60 years of age group. Most of the patients belonged to lower class 49.27% (n=34) and lower middle class 28.98% (n=20) according to modified B.G. Prasad socio-economic scale.

Table 1 :- Distribution of patients according to demographic characteristics

CHARACTERISTICS	NUMBER OF PATIENTS n (%)
AGE (IN YEARS)	
< 30 YRS	05 (7.24%)
31-40 YR	11 (15.94%)
41-50 YR	20 (28.98%)
51-60 YR	15 (21.73%)
61-70 YR	09 (13.04%)
71-80 YR	09 (13.04%)
SEX	
MALE	54 (78.26%)
FEMALE	15 (21.73%)
SOCIOECONOMIC STATUS	
LOWER CLASS	34 (49.27%)
LOWER MIDDLE CLASS	20 (28.98%)
MIDDLE CLASS	15 (21.73%)

Table 2 showed the distribution of patient according to their habits it shows most of the patient are tobacco chewer 62.31% (n=43) followed by betel nut chewer 10.14% (n=07). Major subsites present in oral cavity was tongue 46% (n=32), whereas buccal mucosa cancer is present in 38% (n=26) patient. least common site were gingivobuccal sulcus and lower lip.

Table 2 :- Distribution of patients according to addictions

ADDICTIONS	No of patients n (%)
Tobacco chewer	43 (62.31%)
Pan chewer	04 (5.79%)
Betel nut chewer	07 (10.14%)
Beedi smoker	05 (7.24%)
Tobacco chewer and beedi smoker	07 (10.14%)
No addictions	03 (4.34%)

Table 3 shows the TNM and histopathological staging of oral squamous cell carcinoma. 73.90% of the cancer cases were in the advanced stages i.e. stage III and IV of TNM classification. Histopathologically 12 cases were diagnosed as well differentiated (grade I) squamous cell carcinoma, 48 cases as moderately differentiated (grade II) squamous cell carcinoma and 07 cases as poorly differentiated (grade III) squamous cell carcinoma.

Table 3 :- Distribution of patient according to clinical and histopathological staging

Staging of patient	No of patients n (%)
Stage 0	02(2.89%)
Stage I	01(1.44%)
Stage II	15 (21.73%)
Stage III	23 (33.33%)
Stage IVA	28 (40.57%)
Histopathological (Border's) grading	
Carcinoma in situ	02 (02.89%)
Grade I squamous cell carcinoma	12 (17.39%)
Grade II squamous cell carcinoma	48 (69.56%)
Grade III squamous cell carcinoma	07 (10.14%)

Discussion

In this present study there was most common age group of presentation was 41-50 years of age 29% (n=20) followed by 51-60 years 22% (n=15). Male (78%) are affected more than female (22%) with male to

female ratio of 3.6:1. mostly patient belonged to lower socioeconomic status (49%).

Demographic profile of patients are similar to Khandekar et al.⁹ in his study of 80 patients of oral squamous cell carcinoma majority of patient belonged to age group of 51-60 years. 49(61.25%) of the subjects were male while 31 (38.75%) were females with male to female ratio of 1.5:1. In his study he showed majority of patients were tobacco chewer n=57 (71.30%).majority of patients 47.5% (n=38) presented in advanced stage of disease i.e in stage III and stage IV.

Oral squamous cell carcinoma is commonest cancer in India accounting for 50-70% of total cancer mortality¹. High proportion of cases among males may be due to high prevalence of tobacco consumption habits among males. Moreover, tobacco is consumed in both chewing and smoking form in males whereas in our society females are not indulged in tobacco smoking the low socioeconomic status may be a risk factor for poor oral hygiene thereby further increasing the risk of oral cancer in tobacco chewers. Balaram et al¹⁰ have shown similar findings in their study among cases of oral cancer.

Charu taneja et al.¹¹ in his study showed that 55% cases of oral squamous cell carcinoma presented in advanced stage i.e in stage III and stage IV. among 432 patients 12% had well differentiated, 39% had moderately differentiated and 31% had poorly differentiated squamous cell carcinoma.

Ganesh et al.¹² in his study of 266 patients of oral cancer found that majority of patients belonged to the 51-60 years age group and 181 (68%) were males and 85 (32%) were females with male to female ratio of 2.1:1. most of the patients belonged to lower class(50.75%) followed by lower middle class (27.06%).

Ashok kumar et al.¹³ In his study, majority of cases were addicted to tobacco 97% whereas 8% had alcohol as additional addiction and only 3% cases were totally not addicted to any addiction. This describes tobacco addiction as a causal factor in carcinogenesis of UADT tumour.

CONCLUSIONS

A significant number of patients continue to present with advanced disease and improved public awareness of symptoms associated with oral cancer is a potential solution to this problem. Research is required regarding selected or opportunistic screening for oral cancer, but at present there is insufficient evidence to support screening. Delayed presentation to health care center, limited accessibility to health services as well as prevalence of addictions within patients increase the chances of oral malignancy as well as distant metastasis.

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