



“A Study on Epidemiological and Clinical Profile of Oral Carcinoma in Eastern Uttar Pradesh.”

KEYWORDS

Carcinoma, Clinical, Epidemiological, Profile, Carcinoma

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ABSTRACT

Background: Tobacco chewing, smoking, and alcohol consumption are well known risk factors associated with oral carcinoma. Almost 20% of the cases worldwide are itself present in India with approximately 1% of the Indian population having oral premalignant lesions.

Objective: The purpose of the present research work was to study epidemiological and clinical profile of oral cancer cases attending a teaching hospital.

Materials and methods: A retrospective study was conducted among 150 histopathologically confirmed oral carcinoma patients. Patient's details of age, sex, occupation, tobacco consumption, site of carcinoma, and staging were studied and analysed

Result: In the present study commonest age group with oral cancer was in 5th and 6th decade of their life. Commonest site was tongue followed by buccal mucosa and mandibular alveolus. Most of the patients were farmers and labourers by profession. Most of the patients were tobacco chewer (40%) followed by smokers (20%) and taking alcohol alone were 30%. Duration of consuming tobacco products was more than 6 years in 27% cases while 3 to 6 year in 20% of the cases. Majority of cases present in stage-III (53%) while in 20% were in stage-IV.

Conclusion: The findings of the study reveal that tobacco consumption is one of the major risk factor present in oral cancer patients with the majority of cases seeking for their health in later decades of life when the prognosis is too worst.

Introduction

Oral Cancer presents with high mortality and disfigurements in human beings. A dental surgeon has important responsibility for screening, detection, and prompt referral for treatment, because the treatment in early stage is less complicated and associated with higher survival rate. The most common type cancer in males & females in relation with tobacco consumption is oral Carcinoma accounting 34% of the cases. Consumption of tobacco and its product is a socially and culturally well-accepted in almost each strata of society in India. Smokeless forms like betel and limed tobacco are commonly used now days. Consumption regarding blended products like gutkha and pan masala is increasing not only among males but also among females, as well as in teen age group and increasing trend among children especially who belonged to lower socioeconomic strata. Only small percentage of oral cancer cases are seen in the persons who do not use tobacco, but majority have the history of tobacco consumption. Many studies have demonstrated smoking and smokeless tobacco products as risk factor for oral cancer; [1] with alcohol consumption further increasing this risk.[2] India is currently harbouring world's highest number (nearly 20%) of buccal-mucosal cancers attributed to tobacco consumption. India is therefore aptly referred as the capital of oral cancer in world with an estimated 1% of the population with oral premalignant lesions.[3] Human papilloma virus,[4] dietary inadequacy,[5] and poor hygiene[6] have also been found to be associated with risk of oral carcinoma. The purpose of this retrospective study was therefore to analyze the epidemiological and clinical profile of oral cancer cases attending a teaching hospital in Eastern Uttar Pradesh.

Materials and methods:

The present study comprises of 150 cases of Oral cancer detected & proved by biopsy in during last six years (tobacco consuming area of Eastern U.P.). All the patients were interrogated in detail record were noted in HIMS, Safedabad, Barabanki, Uttar Pradesh. The information collected on the study schedule was transferred on the

pre- designed classified tables and analysed according to the aims and objectives.

Results:

The study consists of 250 patients with oral health problems. After examination of the oral cavity, biopsy piece taken in doubtful area of 150 cases having tendency to be turnout malignant. Males outnumbered the females by 60%. The majority of the patients were in 5th & 6th decade of their life. Occupational status was also recorded and most common patients were labourers (40%) followed by farmers (33%). The personal habits revealed tobacco chewing with lime (40%) followed by smoking (30%) and alcohol 20% while Tobacco chewing +Alcohol, Tobacco chewing +Smoking & Tobacco chewing +Alcohol+ Smoking were comparatively very less (7%). The most frequent site was tongue (33%) followed by buccal mucosa (26%) and then mandibular alveolus (20%). Majority of patients presented in stage-III (53%), followed by stage-IV (20%) while duration was symptom were quite variable. The majority of the patients reported for check-up after more than one year.

Discussion:

The present study showed that the majority of oral cancer cases (60.0%) were tobacco consumers before being diagnosed with oral carcinoma. Such relationship between consumption of tobacco products and oral cancer are reported in several studies. [1, 7] This might be due to fact that males have more easy access to tobacco products than females. In Like previous other reported study the most affected age group was in fifth and sixth decade of life. [7, 8, 9] The majority of patients belonged to economically weaker section (labourers and farmers) who are more prone to consume tobacco because of lower educational background and lack of awareness about consequences of tobacco consumption. [7] Most of the patients had duration of symptoms more than six years. As reported in other studies in Indian subcontinent, the buccal mucosa and gingival buccal sulcus are more commonly affected due to placement of tobacco quid like khaini, gutkha, betel quid etc.; in oral cavity.[10]

Buccal mucosa and gingivo buccal sulcus were the most affected site in the present study. Other Indian epidemiological studies also found similar outcomes. [8,11] Late diagnosis of carcinoma is quite a major problem in developing nations like India, which adversely affects the treatment outcome.[7, 11] We observed the same in the present study as most of the cases were Stage III (53.0%) followed by Stage IV disease (20.0%)

Conclusions: The study revealed a quite high consumption of tobacco and associated products among patient with oral carcinomas. Tobacco was used along with lime for more than 6 years of duration. The majority of cases reported at an advanced stage of the disease which increases the burden of disease and worsens the prognosis.

Table No.1 Distribution of study population on basis of biosocial-characteristic and personal habit

Biosocial-characteristic	Number	Percentage (%)
Gender		
Male	90	60
Female	60	40
Age		
30-40	10	6.6
41-50	30	20
51-60	50	33.3
61-70	60	40
Occupation		
Farmer	50	33
Labourer	60	40
Rtd. Persons	20	13
Self Employed	20	13
Personal habits		
Tobacco Chewing alone	60	40
Smoking alone	30	20
Alcohol alone	20	13
Tobacco Chewing + Alcohol	10	6.6
Tobacco Chewing + Smoking	10	6.6
Tobacco Chewing + Alcohol + Smoking	10	6.6
No habits	10	6.6

Table No.2 Distribution on the basis of clinical profile

Period	Number	Percentage(%)
Duration of Symptoms		
1 Year	20	13
3 Year	30	20
4 Year	30	20
6 Year	30	20
More than 6 Years	40	27
Distribution of Primary site		
Buccal Mucosa	40	26.6
Mandibular Alveolus	30	20
Tongue	50	33.3
Lips	10	6.6
Floor of Mouth	20	13.3
Staging of oral Carcinoma		
Stage - I	20	13
Stage - II	20	13
Stage - III	80	53
Stage - IV	30	20



Fig 1. Oral Submucous fibrosis

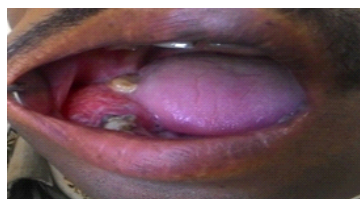


Fig 2. Carcinoma of alveolus



Fig 3 Leukoplakia with ulcerative lesion on tongue

References:

- Misra S, Chaturvedi A, Misra NC. Oral carcinoma. In: Johnson CD, Taylor I, editors. Recent Advances in Surgery. London: Royal Society of Medicine Press;2002. pp.71–86.
- Ogden GR, Wight AJ. Aetiology of oral cancer: Alcohol. Br J Oral Maxillofac Surg. 1998;36:247–51.
- Chaturvedi P. Effective strategies for oral cancer control in India. J Cancer Res Ther. 2012;8(Suppl 1):S55–6.
- D'Souza G, Kreimer AR, Viscidi R, Pawlita M, Fakhry C, Koch WM, et al. Case-control study of human papillomavirus and oropharyngeal cancer. N Engl J Med. 2007;356(10):1944–56.
- Sánchez MJ, Martínez C, Nieto A, Castellsagué X, Quintana MJ, Bosch FX, et al. Oral and oropharyngeal cancer in Spain: Influence of dietary patterns. Eur J Cancer Prev. 2003;12:49–56.
- Garrote LF, Herrero R, Reyes RM, Vaccarella S, Anta JL, Ferbeyre L, et al. Risk factors for cancer of the oral cavity and oro-pharynx in Cuba. Br J Cancer. 2001;85:46–548.
- Mahendra Pratap Singh, Sanjeev Misra, Siva Prakash Rathanaswamy, Sameer Gupta, Brij Nath Tewari, Madan Lal Brahma Bhatt, Vijay Kumar. Clinical profile and epidemiological factors of oral cancer patients from North India. Natl J Maxillofac Surg. 2015 Jan-Jun; 6(1): 21–24.
- Sharma P, Saxena S, Aggarwal P. Trends in the epidemiology of oral squamous cell carcinoma in Western UP: An institutional study. Indian J Dent Res. 2010;21:316–9.
- Addala L, Pentapati CK, Reddy Thavanati PK, Anjaneyulu V, Sadhnani MD. Risk factor profiles of head and neck cancer patients of Andhra Pradesh, India. Indian J Cancer. 2012;49:215–9
- Misra S, Chaturvedi A, Misra NC. Management of gingivobuccal complex cancer. Ann R Coll Surg Engl. 2008;90:546–53.
- Shenoi R, Devrukhkar V, Chaudhuri, Sharma BK, Sapre SB, Chikhale A. Demographic and clinical profile of oral squamous cell carcinoma patients: A retrospective study. Indian J Cancer. 2012;49:21–6.