



IS TOBACCO BAN THE VERY FIRST STEP IN STOPPING ORAL AND OROPHARYNGEAL CANCERS? – A RETROSPECTIVE STUDY

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Dr Tanmoy Sarkar Senior Resident, Department Of ENT, Barasat Government Medical College And Hospital, West Bengal.

Dr Riya Das* Senior Resident, Department Of ENT, R.g. Kar Medical College And Hospital, West Bengal. *Corresponding Author

ABSTRACT

Background : This research article aims at identifying the addictive etiological factors that contribute to oral and oropharyngeal malignancies. With the uprising curve of various kinds of addictions among youth, the number of these cancers is only going to rise in near future. Tobacco and alcohol are the common risk factors and are synergistic in nature and are susceptible 15 times higher than the general population. (1) **Introduction :** Oral and oropharyngeal cancers belongs to the group of Head and Neck Cancer creating an economic burden of \$386 million each year. Head and Neck cancers ranks sixth among the common oncological diseases worldwide. Smoking, tobacco chewing ,betel nut chewing and alcohol are the most commonly found addiction profile of these patients. Tobacco has also been described as gateway substance for alcohol consumption. **Materials and methods :** This is a retrospective type of study conducted over a period of 9 months with a sample size of 65. Site specific proven cases of malignancy were included in the study. **Results:** Tongue is the most affected site in oral cancer and base of tongue in oropharyngeal cancer. 5th decade , middle class male are most affected with smoking posing greatest risk in oropharyngeal cancer and tobacco chewing in oral cancer. **Conclusion:** A large proportion of population is still at risk of developing these cancers because they are getting driven towards these addictions without knowing the long term consequences that they are going to face. This study highlights how tobacco and tobacco containing products are fatal to life and an urgent ban is probably the only way to control this situation.

KEYWORDS

Addiction, smoking , alcohol, tongue

INTRODUCTION:

Oral cancer is one of the commonest cancers in India, and as per the Globocan 2020 data, it is the most common cancer among Indian males and the second most common cancer in both sexes. (2) Oral and oropharyngeal cancers are on a rising trend creating an economic burden of almost \$386 million each year. These cancers begin in the epithelial lined cells of oral and oropharyngeal mucosa. They are closely to the uprising trend of smoking cigarettes and tobacco consumption. While cigarettes contain less than a gram of tobacco, tobacco products may contain as high as up to 17 grams of tobacco. Kandel popularized the concept of tobacco being a “gateway substance” for alcohol consumption. (3) The relative risk of developing oral cancer among alcohol users ranges from 3.2 to 9.2 for people who consume >60 gm/day (equivalent to 4 drinks/day). (4,5) During areca nut chewing, the oral mucosa is persistently stimulated by the areca nut extracts and arecoline, which causes induction of c-Jun proto-oncogene. (6) This study aims at identifying the different addictive etiological factors causing oral and oropharyngeal cancers.

MATERIALS AND METHODS:

This is a retrospective study conducted in a R.G.Kar Medical College and Hospital for a period of 9 months from December,2021 to August,2022 with a sample size of 65. (Oral cancer= 40 , Oropharyngeal cancer=25). Site specific, biopsy proven cases of malignancy were only recruited in the study and thus chosen as the sampling method. A detailed history of each patient was taken including occupation, addiction profile etc. The socioeconomic status of these patients was determined using the B.G Prasad scale.

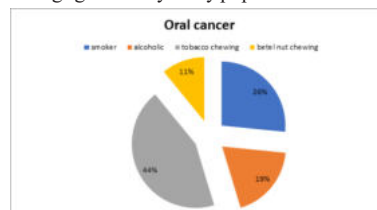
RESULTS:

The most common site for oral cancer was lateral border of tongue followed by floor of mouth, probably, because of pooling of carcinogens mixed with saliva at the bottom of mouth which are lined by thin mucosa. On the other hand, base of tongue followed by tonsil was mostly affected site in oropharyngeal cancers.

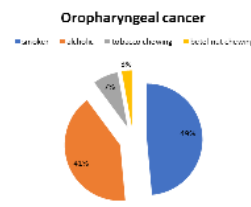
The male population were largely affected and predominant age group being the 5th decade of life for both.

Based on B.G.Prasad scale of socioeconomic status, lower middle class were most affected in oral cancer and upper middle class in oropharyngeal cancer.

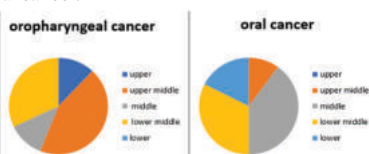
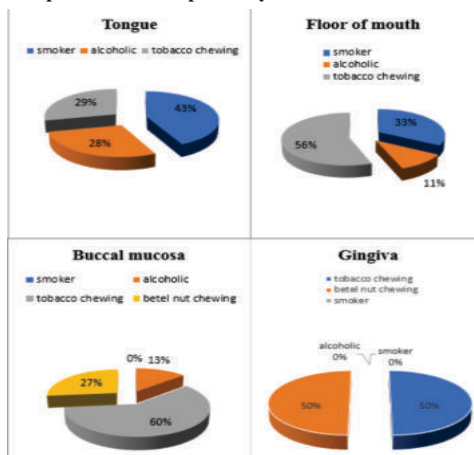
A thorough history was taken for the patient's addiction profile, duration and severity. Smoking, tobacco chewing, betel nut chewing and alcohol consumption are mainly included in this study considering the fact that most patients were addicted to these while other forms of addiction were negligible in my study population.

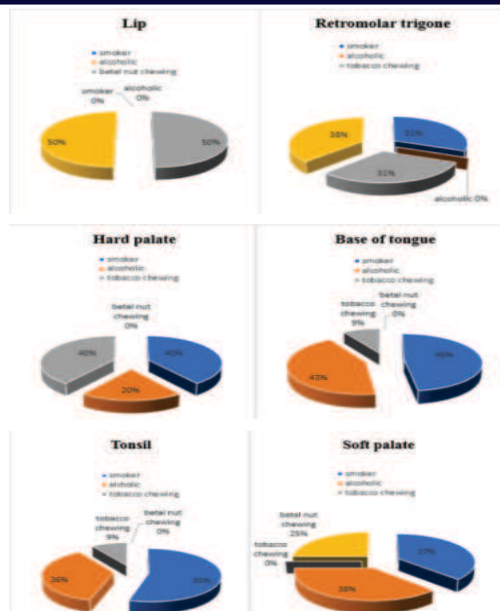


Addiction profile in oral cancer patients:



Addiction profile in oropharyngeal cancer:
Addiction profile and site specificity:





Thus, we can conclude that tobacco chewing and smoking is the most dangerous habit owing to oral and oropharyngeal cancer.

DISCUSSION:

To summarise the key findings, 5th decade male, middle class population are mostly affected. The most common site for oral and oropharyngeal cancer was lateral border of tongue and base of tongue respectively. Commonly, the addictive etiological factors attributing to the disease was found to be smoking, tobacco chewing, betel nut chewing and alcohol consumption. Among these tobacco and tobacco containing substances scored the highest percentage not only overall but also in most of the site-specific zones of oral cancer. In cancers of the retromolar trigone, gingiva and lip, betel nut chewing was found to be most common addictive etiological factor. In case of oropharyngeal cancer, alcohol and smoking contributes maximum to the disease.

Conflict Of Interest : NO

Funding : NO

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