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Oral Squamous Cell Carcinoma in Young Male Patients due to Lack of Awareness about Deleterious Habits of Tobacco Addiction: Original Case Series and Review of Literature

Dr. Ranjan Ghosh^{1*}, Dr. Debarati Ray², Dr. Sumit Ray³, Dr. Sanjib Mitra⁴, Dr. Aniket Adhikari⁵
¹BDS, MDS (Oral Pathology), PGDHS (Tobacco Control), Department of Oral Pathology, Burdwan Dental College and Hospital, West Bengal, India

²MDS (Oral Pathology), Associate Professor, Department of Oral Pathology, Dr R Ahmed Dental College and Hospital, Kolkata, India ³MD (Pathology), Associate Professor, Department of Pathology, Medical College and Hospital, Kolkata, India ⁴MDS (Oral Pathology), Professor, Department of Oral Pathology, Burdwan Dental College and Hospital, West Bengal, India ⁵MSc, Ph.D. (Oral Cancer), University of Calcutta, Kolkata, India

Abstract: Oral Squamous cell carcinoma is the most common malignancy of the oral cavity. It affects the epithelial tissue and is associated with tobacco use in majority of the cases. Tobacco is used in various forms in India. Many people use a combination of smokeless tobacco, areca nut products as well as smoking products. Traditionally, this malignancy was found in elderly population not before fifty years of age. We present a case series of three cases who are all young male patients with oral Squamous cell carcinoma. All these patients started their deleterious habit at a very young age in their teenage. Due to lack of awareness and poor financial as well as social conditions, they were heavily influenced by advertisements and media which sell tobacco products. We here try to discuss the vulnerability of young men who fall into this trap. In this way, many productive young lives are lost to the scourge of tobacco addiction.

Case Series

*Corresponding Author:

Dr. Ranjan Ghosh
BDS, MDS (Oral Pathology),
PGDHS (Tobacco Control),
Department of Oral Pathology,
Burdwan Dental College and
Hospital, West Bengal, India

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Introduction

Oral Squamous cell carcinoma is the most common cancer in India which provides almost one third of the total burden seen worldwide [1]. The increasing incidence of oral cancer is a major concern of poor community health in the country [2]. Most of the cases in India are reported at an advanced stage as compared to western countries which results in poor prognosis [3]. Tobacco consumption both in the form of smoking and smokeless are the major causes and risks associated with oral Squamous cell carcinoma. Bidi smoking and alcohol consumption lead to higher risk of development of oral cancer [4]. The continual use of tobacco in various forms such as gutkha, mawa, khaini, hookah, bidi etc is a major

cause of tumour development in both young and adult population [5].

In general, the commonest age for development of Oral cancer in India was 5th decade of life. Buccal mucosa and gingivobuccal sulcus are the most common sites and smokeless tobacco the most common factor [6]. It has been observed in recent times that the age of detection of oral Squamous cell carcinoma is decreasing and now it is increasingly occurring in younger individuals in their twenties and thirties. This is emphasized in the case series presented here. Lack of awareness among young individuals and early start of oral deleterious habits play a big role in the occurrence of Squamous cell carcinoma in the young.

CASE SERIES

We present here a series of 3 cases. All patients are young males. Their age was 28, 30 and 32 respectively. All of them gave the history of chewing smokeless tobacco and pan masala. One of the patients also used to smoke. The common thread among all of them was that they had all started the oral deleterious habit before the age of 20 years. Two of the patients developed oral sub mucous fibrosis. All of them presented with ulcerated lesions with a history of a few months. The sites of the lesions were alveolar ridge, Buccal mucosa and lateral border of the tongue respectively. Incisional biopsy was done for all the patients under local anaesthesia and tissue was sent for histopathology.

Histopathology revealed similar features for all patients. It was found that sections stained with H & E showed infiltration of epithelial cells into the connective tissue. There was abundant formation of epithelial and keratin pearls. Dense mixed inflammatory infiltrate was present. The overall features were consistent with Well Differentiated Squamous cell carcinoma. The patients were referred to higher centers for further treatment.



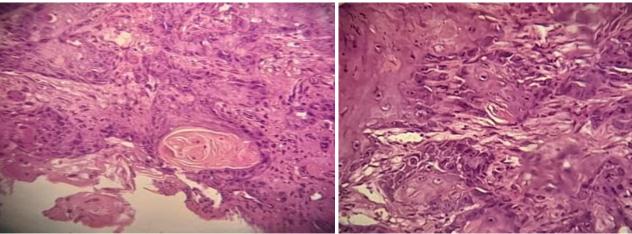
Case 1



Case 2



Case 3



HISTOPATHOLOGY (Haematoxylin and Eosin)

DISCUSSION

The increasing incidence of Oral Squamous Cell Carcinoma in young adults is of grave concern. This is leading to loss of valuable work force for the country. It has been observed that chewing tobacco is being used along with Pan Masala which is advertised by the biggest film stars and other famous personalities. People with low education and lower socioeconomic status are very vulnerable [7]. It has been found in many studies that we require preventive strategies in the formative years of life and young age. The big tobacco and Pan masala companies follow the motto of "catch them young" to maximize sale and profits. It has been observed that awareness of ill effects of tobacco was lowest among the poor people [8]. There is a need to include strategies for deeper penetration of health promotion activities and bringing desired behavarioul changes in the young individuals [9]. Public health awareness, raising a mass movement against tobacco, sensitizing health care professionals and expansion of tobacco control centers can have a huge impact on preventing young individuals from falling into this trap of tobacco addiction [10].

CONCLUSION

Oral Squamous cell carcinoma which is the most common malignancy of the oral cavity was traditionally a disease of middle and old aged male individuals. Due to rapid rise in sale of processed areca nut products along with tobacco use which starts very early in life, mostly in teenagers, this deadly disease is now found in young patients. Advertisements of these products by the biggest media stars as well as sports persons are having a harmful impact on the young minds. Even big sporting events are being targeted by these companies. There is serious lack of awareness and knowledge among the targeted groups about the ill effects of these chewing products. The whole health and education system including central and state governments, schools, hospitals, health professionals, social media etc should be geared to protect our young population from this disease and prevent loss of lives.

REFERENCES

- 1. Borse, V., Konwar, A. N., & Burghoain, P. (2020). Oral cancer diagnosis and perspectives in India, *Sensors International*, 1, 100046.
- Sharma, S., Satyanarayana, L., Asthana, S., Shivalingesh, K. K., Goutham, B. S., & Ramachandra, S. (2018). Oral cancer statistics in India on the basis of first report of 29 population-based cancer registries, *J Oral Maxillofac Pathol*, 22, 18-26.
- 3. Veluthattil, A., Sudha, S., Kandaswamy, S., & Chakkalakkoombil, S. (2019). Effect of hypofractionated, palliative radiotherapy on quality of life in late-stage oral cavity cancer: a prospective clinical trial, *Indian J Palliat. Care*, 25(3), 383-390.
- Subapriya, R., Thangavelu, A., Mathavan, B., Ramachandran, C. R., & Nagini, S. (2007). Assessment of risk factors for oral Squamous cell carcinoma in Chidambaram, Southern India: a casecontrol study, European Journal of Cancer Prevention, 16, 251-256.
- 5. Varshitha, A. (2015). Prevalence of Oral cancer in India. *J Pharmaceut Sci Res*, 7, 845-848.
- 6. Singh, M. P., Kumar, V., Agarwal, A., Kumar, R., Bhatt, M. L. B., & Mishra, S. (2016). Clinico epidemiological study of oral Squamous cell carcinoma: A tertiary care study in North India. *J Oral Biol Craniofac Res*, 6(1), 31-34.
- Sharma, D., Goel, S., & Lal, P. (2017). Education differential in relation to tobacco use and its predictors across different regions of India. *Indian J Cancer*, 54, 584-588.
- 8. Driezen, P., Abdullah, A. S., & Nargis, N. (2016). Awareness of tobacco-related health harms among vulnerable populations in Bangladesh: findings from the international tobacco control (ITC) Bangladesh survey. *Int J Environ Res Public Health*, 13, 848.
- 9. Kankariya, A., Sahoo, S. S., & Verma, M. (2021). Awareness regarding the adverse effect of tobacco among adults in India: findings from secondary data analysis of Global Adult Tobacco Survey. *BMJ Open*, 11(6), e044209.
- 10. Mishra, G. A., Pimple, S. A., Shastri, S. S. (2012). An overview of the tobacco problem in India. Indian J Med Paediatr Oncol, *33*(3), 139–145.