

How to Cite:

Sharma, R., & Malhotra, A. (2022). A study of clinico-etiological profile of oral and oropharyngeal lesions in a tertiary care centre. *International Journal of Health Sciences*, 6(S2), 77–82. <https://doi.org/10.53730/ijhs.v6nS2.4969>

A Study of Clinico-Etiological Profile of Oral and Oropharyngeal Lesions in a Tertiary Care Centre

Rakesh Sharma

Department of ENT, Government Medical College, Kathua

Abhishek Malhotra

Government Medical College, Kathua

Abstract---Stress and lack of adequate sleep do have an increased likelihood of an individual suffering from recurrent oral aphthous ulcers. IBD (inflammatory bowel disease) and chronic constipation also have an influence of a higher incidence of oral ulcers. Intake of spicy food such as pickles, tomato, tamarind sauce, lemons also increase the incidence of oral ulcers. Higher incidence of benign oral papillomas in sexually active age group highly suggests the association of HPV with occurrence of papillomas.

Keywords---aphthous ulcers, mucus retention cyst, oral submucous fibrosis, papilloma.

Introduction

While it's a common occurrence to examine patients presenting in the ENT outpatient department with symptoms related to the oral cavity. Of late this has become even more challenging. The reason is not just the presentation but also the apprehensions and fear that brings many such patients to the ENT OPD. The reasons could be manifold. The massive awareness campaigns that have been launched by various government and non-government agencies is one such reason. Whereby making the public aware of the various conditions that can lead to, if not cause oral malignancies. Amongst the various lesions that the patients present in the ENT OPD with, ulcers in the oral cavity is one of the commonest complaints. Also, that every ulcer inside the oral cavity or oropharynx is not premalignant and that there is little cause for worry if proper treatment is initiated. The ulcers could be due to infection, immune disorder, trauma, neoplasm, blood disorders, drug allergy, vitamin deficiency, skin disorders, or it could even be due to radiation mucositis, cancer chemotherapy, diabetes mellitus, uraemia (1).

International Journal of Health Sciences ISSN 2550-6978 E-ISSN 2550-696X © 2022.

Corresponding author: Sharma, R.; Email: drakishsharma@gmail.com

Manuscript submitted: 27 Nov 2021, Manuscript revised: 09 Feb 2022, Accepted for publication: 18 March 2022

Besides oral ulcers there are a wide gamut of lesions that the patients present to the ENT OPD like papillomas, mucus retention cysts, submandibular duct calculi, lichen planus, submucous fibrosis. There are also pre malignant lesions like leukoplakia, erythroleukoplakia that the patients present with. The squamous cell carcinoma is the commonest form of oral cavity malignancy and is slated to be the twelfth commonest malignancy in the world.² Oral malignancy remains one of the major health concerns in India. Tobacco is the prime etiological factor resulting in oral malignancy. Tobacco here in India is consumed in different forms like betel quid, tobacco with lime, bidi, hookah, etc. Human papilloma virus^{3,4} and dietary deficiencies⁵ and poor oral hygiene⁶ are minor etiological factors of oral carcinoma. People belonging to the poor socio-economic strata are more commonly affected by oral malignancy. The reason could be lack of awareness and also a higher consumption of tobacco in its various forms.

India has the largest portion (nearly 20%) of oral malignancies globally and approximately 1% of those who have premalignant lesions affecting the oral cavity [6]. A significant number of walk-ins to the ENT OPD are the patients who apprehend malignancy with many looking inside their oral cavities in a mirror and many a times even normal structures being misconstrued as some kind of growth or abnormality. As a result of which they rush to the ENT out patient in sheer panic. Many a times even after a thorough clinical examination its very tough to convince such patients that there is little to worry. With many such patients pressing upon the clinicians to put them through radiological investigations and/ or endoscopies, when they are seldom required. Keeping these aspects in mind and driven by curiosity to analyze and assess the various lesions that present in our ENT OPD, we decided to conduct this study of the clinico etiological profile of oral and oropharyngeal lesions presenting in the department of ENT at GMC kathua.

Method

With the prime objective to investigate the various pathologies that affect the oral cavity and oropharynx and the possible etiological factors, we conducted this study at the department of ENT at Government medical college Kathua. The study was taken up after getting a due clearance from the institutional ethics committee of Government medical college, kathua. Ours was a prospective observational study involving the patients who had come to the ENT OPD with complaints related to the oral cavity and oropharynx between September 2020 unto February 2021. The study involved a total of 181 patients. All the patients were subjected to a detailed history taking which included a thorough dig into their personal habits, lifestyle, history of any systemic disease, drug allergy. An enquiry was also made about their being on any medication at the time of presentation. A note was also made about the socioeconomic status of the patient. The basis of this was not just the appearance but the possession of a BPL (below poverty line) ration card. The cases who presented with lesions that were clinically suspected to be malignant were subjected to biopsy and the diagnosis was confirmed by histopathological examination. A written consent was obtained from all the patients included in the study. Those who refused to give written consent were excluded from the study.

Results

The study involved 181 patients. Amongst them there were 97 males and 84 females. Amongst the males, various lesions that the patients had presented to us with included 25 cases of aphthous ulcers, 17 cases of papilloma, 14 cases of squamous cell carcinoma involving the buccal mucosa, 4 cases of squamous cell carcinoma of lateral margin of tongue, 7 cases of mucus retention cysts, 5 cases of submandibular duct calculi, 10 cases of oral sub mucus fibrosis, 3 cases of tonsillar crypta magna. Amongst the males there were 12 patients who had come with the fear of malignancy and on thorough clinical examination they were found to be normal. Amongst the females the various lesions that presented to us included 35 cases of aphthous ulcers, 18 cases of papilloma, 9 cases of mucus retention cysts, 6 submandibular duct calculi, 3 cases of submucosa fibrosis, 2 cases of malignancy involving the tongue. Amongst the females there were 11 patients who had come with the fear of malignancy and on thorough clinical examination they were found to be normal.

Interestingly the number of patients presenting with acute tonsillitis and acute pharyngitis while this study was conducted (September 2020 upto February 2021) was less. With only 21 such patients (12 males and 5 females) presenting to our OPD. The reason could be a greater precaution rate amongst the general public due to the then prevalent covid pandemic. Or even the fear of being infected by covid 19 on coming to the hospital. Also the fear of having to go through administrative hassles and covid screening could have been a reason why we had a far lesser cases of acute throat infections presenting to our outpatient department during the period while this study was conducted by us. Amongst the 60 patients with aphthous ulcers (25 males and 35 females), 19 had a history of an IBD (inflammatory bowel disease) and chronic constipation suggesting that conditions like IBD affecting the gut did have an influence of a higher incidence of oral ulcers [7][8]. Similar findings were reported in a study done by Lourenço et al, wherein they reported a higher incidence of oral ulcers in patients with inflammatory bowel disease. Muhvic' et al reported aphthous stomatitis and angular cheilitis, as the commonest oral manifestations in IBD patients. They had also reported that non-specific lesions in the oral cavity can also be the result of malnutrition and drugs given for IBD management. Malnutrition, followed by anemia and mineral and vitamin deficiency, affects the oral cavity and teeth. Also that many drugs used for managing inflammatory bowel diseases could trigger changes in the oral cavity as a result of direct adverse effects of the drugs on oral tissues, as well as indirect immunosuppressive effects with possibility of developing opportunistic infections.

In our study 17 of our patients with aphthous ulcers gave a history of stress and lack of adequate sleep. Amongst these 7 patients were on anti anxiety medication. Stress does have an increased likelihood of an individual suffering from recurrent oral aphthous ulcers [9]. Soto Araya et al also suggested a significant association between these psychological disorders and pathologies affecting the oral mucosa in their study. They had observed that the stress level was greater in patients with recurrent aphthous stomatitis and oral lichen planus. They had also found depression to be high in patients with BMS, and higher levels of anxiety. Eleven patients amongst those presenting with aphthous ulcers had a history of intake of

acutely spicy food such as pickles, tomato, tamarind sauce, lemons [10]. Hay KD et al in their work had studied seventeen patients with recurrent aphthous ulcers unresponsive to other forms of therapy with the help of a strict elimination diet. Amongst these 5 patients abandoned the difficult diet, while out of the remaining twelve 5 patients had recurrence of oral ulcers while on the diet. In four of these five patients a particular food was identified which, when eliminated from the normal diet, resulted in significant improvement. The results of their study strongly suggested role of food components in the etiology of recurrent oral ulcers. In our study we had 35 patients presenting with papillomas. Amongst these we had 17 males and 18 females. All of them were subjected to excision biopsy under local anaesthesia. The diagnosis of benign papilloma was established on histopathology. In this group we discovered that all the patients belonged to the 20–40-year age group [11]. This strongly suggests an association of lesions in the sexually active age group. Possibly highlighting the association of HPV with occurrence of papillomas.

Amongst the various patients in the study group, 13 patients had submucous fibrosis. Amongst these ten patients were males and there were three females. From their personal history, it was discovered that all these patients had the habit of chewing gutkha, pan masala (containing areca nuts, lime and catechu) [12]. Interestingly the three females who had submucous fibrosis were laborers and even they gave a history of chewing gutkha. Anoop M et al in their study had also reported pan chewing and its various products as having a strong association with oral submucous fibrosis. They also opined that tobacco usage added to the severity of the problem. Amongst the 16 cases of mucus retention cysts that we examined in our study, the diagnosis was made on the basis of clinical examination and confirmed on histopathological examination following excision biopsy of the retention cysts. All but one patient gave a history of trauma, lip bite or accidental bite (buccal mucosa) while eating [13][14]. Yamasoba T in their study had reported trauma to the buccal mucosa as the likely cause for lower lip mucocoeles.

In our study the total number of patients who presented with malignancy was 20. The diagnosis of malignancy was established by biopsy. Amongst these patients, 14 patients had SCC of buccal mucosa and 6 cases had squamous cell carcinoma of lateral margin of tongue. Amongst these 9 cases were involving the gingivobuccal sulcus, 2 cases the retromolar trigone and 3 cases had a widespread malignancy with cervical metastasis. In our study we discovered that all the patients who had SCC gave a positive history of tobacco consumption in some form or the other. Similar findings were observed in the study done by Llewelyn J et al who observed that 60% of the oral malignancy patients consumed tobacco. [15] In another study Jaber et al highlighted the significance of tobacco in the progress of epithelial dysplasia [16]. Five patients amongst the 20 patients presenting to us with oral malignancy gave a history of alcohol consumption. Three of the six patients presenting with squamous cell carcinoma of lateral margin of tongue had sharp jagged teeth. Lockhart et al in their study had observed that all their oral neoplasm cases occurred in areas of contact with teeth and/or dental appliances [17].

Three of the patients with buccal mucosa malignancy had presented with neck mass and it was only on examination of the oral cavity the lesion was detected. And the diagnosis was confirmed after biopsy. The FNAC showed metastasis in the neck masses in these three patients. . Olsen KD et al in their study had recommended a through head and neck examination of any patient presenting with a neck mass. Many similar works involving the neck masses do seem to suggest that a neck mass in an adult patient should be thoroughly investigated with a strong suspicion of malignancy until proven otherwise. [18,19,20,21].

Conclusion

Stress and lack of adequate sleep do have an increased likelihood of an individual suffering from recurrent oral aphthous ulcers. IBD (inflammatory bowel disease) and chronic constipation also have an influence of a higher incidence of oral ulcers. Intake of spicy food such as pickles, tomato, tamarind sauce, lemons also increase the incidence of oral ulcers. Higher incidence of benign oral papillomas in sexually active age group highly suggests the association of HPV with occurrence of papillomas. The habit of chewing gutkha, pan masala (containing areca nuts, lime and catechu) increases the likelihood of the person developing oralsub mucus fibrosis.

The oral mucus retention cysts are almost invariably related to trauma, lip bite or accidental bites. Tobacco and alcohol consumption leads to a higher incidence of oral malignancies. Also that sharp jagged teeth if left unattended can result in malignancy of the lateral margin of tongue. All patients presenting with neck masses should have a thorough oral, oropharyngeal and laryngeal examination in order to rule out any primary lesion. The pandemic has resulted in a decreased number of patients presenting to ENT OPD with acute tonsillitis, acute pharyngitis. The reason could be use of masks, social distancing.

References

1. Diseases of Ear, Nose And Throat & Head and Neck Surgery, PL Dhingra, 6th edition, chapter 42 217-220.
2. Misra S., Chaturvedi A., Misra N.C. Management of gingivobuccal complex cancer. *Ann R Coll Surg Engl.* 2008; 90:546–553
3. Furniss C.S., McClean M.D., Smith J.F. Human papillomavirus 6 seropositivity is associated with risk of head and neck squamous cell carcinoma, independent of tobacco and alcohol use. *Ann Oncol.* 2009; 20:534–541.
4. Ragin C.C., Modugno F., Gollin S.M. The epidemiology and risk factors of head and neck cancer: a focus on human papillomavirus. *J Dent Res.* 2007; 86:104–114.
5. Sánchez M.J., Martínez C., Nieto A. Oral and oropharyngeal cancer in Spain: influence of dietary patterns. *Eur J Cancer Prev.* 2003; 12:49–56
6. Talamini R., Vaccarella S., Barbone F. Oral hygiene, dentition, sexual habits and risk of oral cancer. *Br J Cancer.* 2000; 83:1238–1242
7. Chaturvedi P. Effective strategies for oral cancer control in India. *J Can Res Ther.* 2012; 8:55–56.

8. 7.Lourenço SV, Hussein TP, Bologna SB, Sipahi AM, Nico MM. Oral manifestations of inflammatory bowel disease: a review based on the observation of six cases. *J Eur Acad Dermatol Venereol*. 2010; 24:204–7
9. 8.Oral pathology in inflammatory bowel disease. Muhvić-Urek M, Tomac-Stojmenović M, Mijandrušić-Sinčić B *World J Gastroenterol*. 2016 Jul 7; 22(25):5655-67.
10. 9.Association between psychological disorders and the presence of Oral lichen planus, Burning mouth syndrome and Recurrent aphthous stomatitis.Soto Araya M, Rojas Alcayaga G, Esguep A *Med Oral*. 2004 Jan-Feb; 9(1):1-7.
11. The use of an elimination diet in the treatment of recurrent aphthous ulceration of the oral cavity. Hay KD, Reade PC *Oral Surg Oral Med Oral Pathol*. 1984 May; 57(5):504-7.
12. Kennedy RA. HPV for the oral surgeon. *Oral Surgery*. 2016;9(1):4–9.
13. Anoop M, Sukhchain Singh Bullar, Shobit Gupta, Himanshu Kumar Gupta, Sumit Gupta, Yusra Lataafat, ROLE OF PAN CHEWING IN ORAL SUBMUCOUS FIBROSIS - OUR EXPERIENCE, *Journal of Evidence Based Medicine and Healthcare*, 10.18410/jebmh/2018/550, 5, 37, (2682-2686), (2018).
14. Yamasoba T, Tayama N, Syoji M, Fukuta M. Clinicostatistical study of lower lip mucocoeles. *Head Neck*. 1990; 12:316–20.
15. Barbería E, Lucavechi T, Cárdenas D, Maroto M. An atypical lingual lesion resulting from the unhealthy habit of sucking the lower lip: Clinical case study. *J Clin Pediatr Dent*. 2006; 30:280–2.
16. Llewelyn J, Mitchell R. Smoking, alcohol and oral cancer in south east Scotland: a 10-year experience. *Br J Oral Maxillofac Surg*. 1994;32(3):146–152. doi: 10.1016/0266-4356(94)90098-1.
17. Jaber MA, Porter SR, Gilthorpe MS, et al. Risk factors for oral epithelial dysplasia--the role of smoking and alcohol. *Oral Oncol*. 1999;35(2):151–156. doi: 10.1016/S1368-8375(98)00106-7.
18. Lockhart PB, Norris CM, Jr, Pulliam C. Dental factors in the genesis of squamous cell carcinoma of the oral cavity. *Oral Oncol*. 1998; 34:133–9.
19. Olsen, KD. Evaluation of masses in the neck. *Prim Care*. 1990; 17:415-435.
20. Lefebvre, JL, Coche-Dequeant, B, Van, JT. Cervical lymph nodes from an unknown primary tumor in 190 patients. *Am J Surg*. 1990; 160:443-446.
21. Bhattacharyya, N. Predictive factors for neoplasia and malignancy in a neck mass. *Arch Otolaryngol Head Neck Surg*. 1999; 125:303-307.
22. Haynes, J, Arnold, KR, Aquirre-Osins, D, Chandra, S. Evaluation of neck masses in adults. *Am Fam Physician*. 2015; 9:698-706.