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AN OVERVIEW OF ORAL MUCOSAL LESIONS IN WESTERN ODISHA – A HOSPITAL
BASED RETROSPCTIVE CLINICO-PATHOLOGICAL STUDY

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Abstract

Background - In oral medicine, dermatologic disease has got special attention, as oral mucosal lesions may be the primary clinical feature or the only sign of various muco-cutaneous diseases. **Aim** - To access the clinical pattern and distribution of oral mucosal lesion (OML) in patients who sought for treatment in department of General Surgery , VIMSAR, Sambalpur . **Materials and methods** – Duration of study was 12 months. In this study 200 cases reporting with oral mucosal lesion were included. Complete clinical data were taken. Dermatological, general and systemic examinations were carried out. Some diagnostic procedures were performed for confirming the diagnosis. **Results** – Among 200 cases 95 were males and 105 were females age varied from 2 years to 75 years. Rural patients were more affected than urban patients. Different pattern of habits were seen in 67 patients (33.5%). Most common condition was lichen planus (n= 63, 31.5%). **Conclusion** – This study showed that oral mucosal lesions were frequently associated with dermatological diseases. Habituated patients were advised to give up smoking and other harmful habits.

Keywords: Oral mucosal lesion, lichen planus, dermatology, smoking, harmful habits.

Introduction

Oral cavity occupies a unique position in the human body with respect to its development, structure, microbiology, functions and diseases. Oral mucosal condition and disease may be caused by local causes (bacteria, viruses and fungi), systemic diseases (immunological or metabolic), drug related reaction or habits of consumption of tobacco, smoking and alcohol **(1)** . Oral mucosal lesion is known as any abnormal alteration in color, surface aspect, swelling or loss of integrity of the oral mucosal surface **(2)** . In oral medicine, dermatologic disease have got special attention, as oral mucosal lesions may be the

primary clinical feature or the only sign of various muco-cutaneous diseases (3,4). In this context most common pathologies are lichen planus, lupus erythematosus, erythema multiforme, pemphigus vulgaris and group of pemphigoid lesions (5, 6, and 7) .

Aim & Objective:-

To evaluate the different clinical spectrum and distribution of oral mucosal lesions in patients attending in a tertiary care hospital.

Materials and Method:-

It was an observational study in which 200 cases reporting with oral mucosal lesion at department of General Surgery , VIMSAR, Sambalpur were included. Duration of study was 12 months, i.e. from January 2022 to January 2023 . Informed consent was taken from all patients. In case of minor consent was taken from guardians. Exclusion criteria was those were not giving consent, post operative head and neck malignancies and post radiation therapy. Complete clinical data were recorded. Dermatological, general and systemic examinations were done. Most of the patients sent for scrape cytology. In few cases histopathological and immunofluorescence studies were done. All other cases were diagnosed clinically.

Results:-

Table:-1 Age and Sex wise Distribution of oral mucosal lesion (n=200)

Age in years	Male	Female	Total	Percentage (%)
< 10	3	11	14	7
11-20	11	12	23	11.5
21-30	22	23	45	22.5
31-40	22	28	50	25
41-50	11	17	28	14
51-60	12	11	23	11.5
➤ 60	14	3	17	8.5

Table:-2 Habit wise Distribution of oral mucosal lesion (n=200)

Pattern of Habits	No. of Cases	Percentage (%)
Smoking	16	8
Tobacco Chewing	33	16.5
Smoking and Tobacco Chewing	18	9
None	133	66.5

Table:-3 Distribution of oral mucosal lesion (n=200)

Sl. No.	Oral Mucosal Lesions	No. of Cases	Percentage (%)
1	Lichen Planus	63	31.5
2	Aphthous Ulcer	22	11
3	Candidiasis	14	7
4	Leucoplakia	13	6.5
5	Erythema Multiformis	11	5.5
6	Pemphigus Vulgaris	10	5
7	Herpes Labialis	9	4.5
8	Toxic Epidermal Necrolysis	8	4
9	Discoid Lupus Erythematosus	7	3.5
10	Varicella	6	3
11	Geographic Tongue	6	3
12	Mucocele	5	2.5
13	Squamous Cell Carcinoma	4	2
14	Herpes Zoster	3	1.5
15	Fordyce's Spots	2	1
16	Atrophic Glossitis	2	1
17	Submucous Fibrosis	2	1
18	Systemic Lupus Erythematosus	2	1
19	Traumatic Ulcer	2	1
20	Hemangioma	1	0.5
21	Squamous Cell Papilloma	1	0.5
22	Scrotal Tongue	1	0.5
23	Bullous Pemphigoid	1	0.5
24	Actinic Cheilitis	1	0.5
25	Secondary Syphilis	1	0.5
26	Pyogenic Granuloma	1	0.5
27	Molluscum Contagiosum	1	0.5
28	Smoker's Melanosis	1	0.5

Among 200 cases 95 (47.5%) were males and 105 (52.5%) were females. The ratio of male to female was 1:1.2. The age group of cases studied varied from 2 years to 75 years. Mean age was 36.1 years and peak age observed in the age group of 31-40 years. Rural patients (65.5%) were more affected than urban patients (34.5%). Different pattern of habits was present in 67 patients (33.5%). Out of these 200 cases, the most common condition was lichen planus (n=63,31.5%) followed by aphthous ulcer (n=22,11%), candidiasis (n= 14,7%), leukoplakia (n=13,6.5%), erythema multiforme (n=11,5.5%), pemphigus vulgaris (n=10,5%), herpes labialis (n=9,4.5%), toxic epidermal necrolysis (n=8,4%), discoid lupus erythematosus (n=7,3.5%), varicella (n=6,3%),geographic tongue (n=6,3%), mucocele (n=5,2.5%), squamous cell

carcinoma (n=4,2%), herpes zoster (n=3,1.5%), fordyce's spots (n=2,1%), atrophic glossitis (n=2,1%), submucous fibrosis (n=2,1%), systemic lupus erythematosus (n=2,1%), traumatic ulcer (n=2,1%), haemangioma, squamous cell papilloma, scrotal tongue, bullous pemphigoid, actinic cheilitis, pyogenic granuloma, molluscum contagiosum, and smoker's melanosis – 1 case each (0.5%). Analyzing the clinical symptoms, most common symptom was reported pain (50%). Most common systemic disease associated with oral mucosal lesions was HIV infection (9%). Duration of lesions ranged from few days to 8 years.

Discussion:–

In accordance with “Moberick and AIDosri” et al **(8)** and “Mujica V and Rivera H” et al **(9)**, our result also showed a higher incidence of oral mucosal lesions among females (52.5%), but “Mathew” et al **(10)** and “Patel” et al **(11)** showed more incidence in males. The patients from rural areas were having higher incidence (65.5%) of oral mucosal lesions than patients from urban areas (34.5%). This marginal increase might be due to factors like negligence and poor health consciousness of this rural community adding to it were high illiteracy rate prevalent there. The factors like smoking and tobacco chewing habits in the patient population risk them to different groups of disease causing oral manifestations. In the present study oral mucosal lesions were found in 16.5% of tobacco chewers. Among 200 cases, 63 cases (31.5%) were lichen planus. This was the most common oral mucosal lesions in our study. According to “Goncalves” et al **(12)** lichen planus (35%) was the common oral mucosal lesion. Reasons behind the highest prevalence of oral lichen planus in both studies were done in patients who sought for treatment at dermatology department. Pain was the most common symptom (50%) in this study and this is compatible with the study done by “Patel” et al **(11)**. Out of 200 cases only 17% cases were associated with systemic diseases in which HIV infection was most common. Oral candidiasis (55%) was found most common in HIV patients.

Conclusion:–

Certain amount of dermatological diseases are strongly associated with oral lesions and could be early sign of any underlying disease and it can be neglected and misdiagnosed due to lack of information therefore cases with oral mucosal lesion requires multidisciplinary approach.

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