



## Clinical Study of Oral Manifestation in Skin Diseases at Tertiary Care Centre in Central India

Authors

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### Abstract

*The study aimed to estimate the frequency of oral lesions in Patient with Skin Manifestation attending a Tertiary Care Centre in Central India. An oral mucosal lesion (OML) is defined as any abnormal change or any swelling on oral mucosal surface. Oral mucosal manifestation may be the initial feature, most florid clinical feature or the only sign of such diseases and sometimes lesions occur in both skin and mucous membrane. Some patients present with oral lesions only, whereas in others, there may be involvement of skin and other mucous membranes.*

**Keywords:** Oral Mucosal Lesions, Oral Cavity, Lichen Planus & Lupus Erythematosus.

### Introduction

Oral cavity can be considered as gateway into the digestive system. The mucous membrane of the oral cavity has been looked upon as mirroring the general health. From a histological and embryological point of view, the mucosa of the oral cavity is similar to the skin, but is subjected to a more complex and inconstant environment.<sup>1</sup> An oral mucosal lesion (OML) is defined as any abnormal change or any swelling on oral mucosal surface.<sup>2</sup> oral mucosal manifestation may be the initial feature, most florid clinical feature or the only sign of such diseases and sometimes lesions occur in both skin and mucous membrane. Some patients present with oral lesions only, whereas in others, there may be involvement of skin and other mucous membranes.<sup>3</sup>

Oral and Oropharyngeal mucosal lesions and swellings are very closely related to the oral cancers. Oral cancers are one of the most prevalent cancers worldwide and constitute a major health problem in developing countries, representing the leading cause of death. Many oral cancers arise within regions that previously had premalignant lesion.

Special attention must be paid to some conditions which are notorious and pre-malignant, viz.

- Leukoplakia
- Verrucous leukoplakia
- Oral lichen planus
- Proliferative erythroplakia
- Squamous carcinoma in situ
- Nicotine stomatitis

- Submucous fibrosis
- Oral candidiasis
- Oral epithelial dysplasia
- Other benign and malignant lesions and swellings.

The most common premalignant lesion seen in oral cavity is Leukoplakia with associated dysplasia.<sup>3</sup>

The Diseases of Oral Cavity are broadly classified as:

### Clinical Impression

#### (A) Surface Lesions of Oral Mucosa:

##### I. White

##### Epithelial Thickening

- Geographical tongue (erythema migrans)
- Hairy tongue
- White spongy nevus
- Hairy leukoplakia
- Lichen planus
- Nicotinic stomatitis
- Hyperkeratosis
- Epithelial dysplasia
- Carcinoma in situ
- Squamous cell carcinoma

##### (II) Vesicular-Ulcerated- Erythematous

##### (a) Viral

- Herpes simplex (primary herpes, secondary herpes)
- Herpangina
- Hand, foot and mouth disease
- Herpes zoster
- Infectious mononucleosis
- Varicella (chicken pox)

##### (b) Autoimmune

- Erosive lichen planus
- Mucous membrane pemphigoid
- Pemphigus vulgaris
- Bullous pemphigoid
- Lupus erythematosus

##### (c) Idiopathic

- Aphthous ulcers

- Erythema multiforme
- Erythroplasia (erythroplakia) – epithelial dysplasia, carcinoma in situ, Squamous cell carcinoma.
- Medication induced mucositis
- Contact stomatitis

##### (d) Mycotic

- Candidiasis

### Material and Methods

#### Study Designed: Retrospective Study

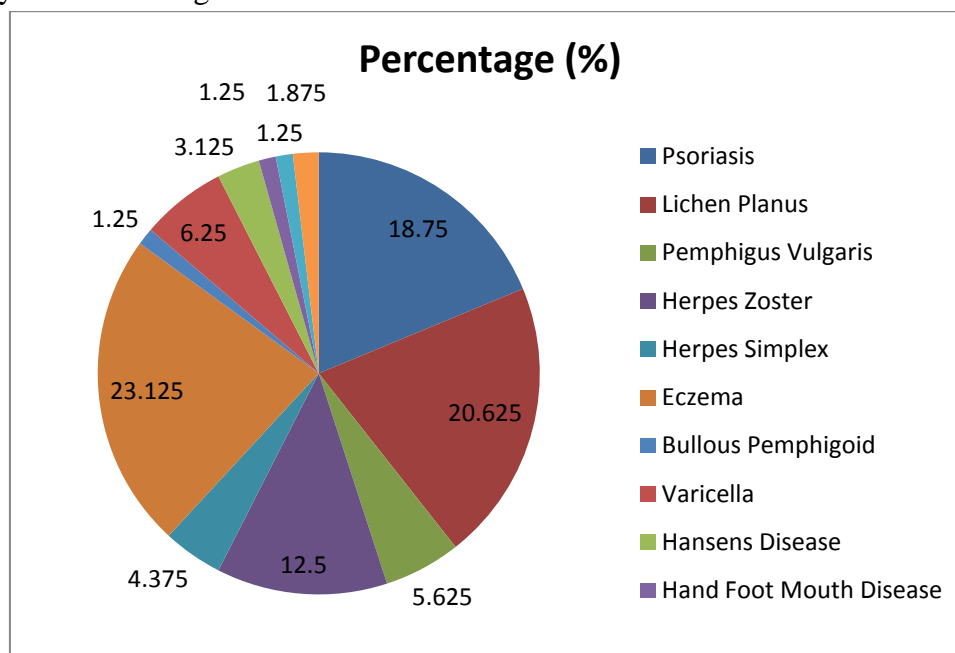
- This is a retrospective study of clinical records of the patients with oral mucosal lesions attending ENT OPD of a tertiary care hospital in central India for 02 years.
- Study design: Retrospective Study.
- The study included 160 patients who visited the Outpatient department of ENT over a period of 02 years. Detailed history and thorough clinical examination of the patients was done. For confirming the diagnosis, cytologic/histopathological procedures were performed as per the requirement. The Dermatological Lesions were clinically recorded & diagnosed by an experienced dermatologist.

### Observation and Result

**Table 1:** Frequency of Dermatological Lesions

Lesions	Frequency (n=160)	Percentage (%)
Psoriasis	30	1.25
Lichen Planus	33	20.62
Pemphigus Vulgaris	09	5.62
Herpes Zoster	20	12.50
Herpes Simplex	07	4.37
Eczema	37	23.12
Bullous Pemphigoid	02	18.75
Varicella	10	6.25
Hansens Disease	05	3.125
Hand Foot Mouth Disease	02	1.25
Syphlis	02	1.25
SJS	03	1.875

**Fig 1:** Frequency of Dermatological Lesions



**Table 2:** Association of Skin Lesions with Oral Manifestations

Skin Lesions	Frequency Oral Lesions	Frequency (n=160)	Percentage Oral Lesions (%)	Oral Lesions
Psoriasis	05	30	16.66	Geographical Tongue
Lichen Planus	09	33	27.27	Ulcer
Pemphigus Vulgaris	07	09	77.77	Ulcer
Herpes Zoster	02	20	10.00	Ulcer
Herpes Simplex	02	07	28.57	Ulcer
Eczema	00	38	00	-
Bullous Pemphigoid	00	02	00	-
Varicella	00	10	00	-
Hansens Disease	01	05	20.00	Ulcer
Hand Foot Mouth Disease	01	02	50.00	Ulcer
Syphlis	01	02	50.00	Ulcer
SJS	03	03	100.00	Ulcer

**Fig: 2** Steven Johnson syndrome (oral lesion)



**Fig: 2** Steven Johnson syndrome (oral lesion)

### Discussion

Dermatological diseases are not only represented by lesions affecting the skin but also by manifestations that may involve the mucous membranes, including oral mucosa<sup>6</sup>. These lesions commonly manifest as vesicular or ulcerative lesions. It is, especially, important for the Otorhinolaryngologist to recognize not only the concomitant oral lesions but also the oral manifestations of some of these diseases which may precede the cutaneous lesions, thus enabling the Otorhinolaryngologist to diagnose and treat initial oral lesions before the appearance of cutaneous lesions.<sup>4</sup>

Although there are many studies reported on individual lesions, there are very few studies that have dealt with a group of mucocutaneous lesions together. Moreover, there is no universally accepted classification of these mucocutaneous lesions. A clinician attempting to diagnose these lesions as ulcerative and vesiculobullous diseases of the oral mucosa is confronted with many diseases having similar clinical appearance unlike the classic appearance of the cutaneous lesions because the oral vesiculobullous lesions rupture soon to form ulcers and sometimes become secondarily infected giving a nonspecific appearance.<sup>5</sup>

In this study Oral lesions were more commonly seen in third and fourth decades, maximum being males. This may be because of more males attending OPD and more prevalence of addiction in them. The pattern of Cutaneous manifestations varied in different age groups<sup>6</sup>.

In this study, 73 (46%) were employed and 87 (54%) were unemployed. Among employed 54 (18%) were skilled labourers while 75 (25%) were unskilled labourers. Majority of males (80%) had addiction and smoking was the commonest addiction. Other common substances were tobacco, betel leaves and areca nuts. Kleinman has observed addiction to tobacco in 10% of young patients which was 8% in our study<sup>7</sup>.

In our study we found that the maximum skin lesions were most common in Eczema (23.12%)

but there was no involvement of Oral Mucosa in patients of Eczema, Lichen Planus (20.62), Bullous Pemphigoid (18.75), Herpes Zoster (12.5), Varicella (6.25), Pemphigus Vulgaris (5.62), Herpes Simplex (4.37), Hansens Disease (3.12), SJS (1.87), Psoriasis (1.25), Hand Foot Mouth Disease (1.25) & Syphilis (1.25).

Common symptomatic diseases were ulcerative diseases like pemphigus vulgaris, aphthous ulcers and herpes zoster. Most common site of involvement was buccal mucosa. Involvement of multiple sites like lips, gums, teeth and buccal cavity was seen in pigmentary disorders, drug reaction and ulcerative diseases.

### Conclusion

According to this study, it can be concluded that Oral Manifestation are commonly associated with skin diseases so, thorough examination of Oral Cavity in patients with skin diseases should be done by Otorhinolaryngologist, so as to improve the Oral health functioning during the course of the disease.

Among them, SJS (100%), Pemphigus Vulgaris (77.77), Syphilis (50%), Hand Foot Mouth Disease (50%) are the diseases that presented a higher frequency of Oral Manifestations.

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