



**ORIGINAL RESEARCH PAPER**

**Dental Science**

**ORAL LICHEN PLANUS – A CLINICAL AND HISTOPATHOLOGICAL STUDY**

**KEY WORDS:**

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**I. INTRODUCTION**

Lichen planus is one of the most common dermatologic lesions to manifest in the oral cavity<sup>1</sup>. The importance of understanding this disease lies in the fact that a large percentage of these cases present only oral lesions. Also the different clinical forms mimic some other more serious disease. The precise aetiology of lichen planus still remains unclear with recent works suggesting an autoimmune role.

The skin lesions in lichen planus are distinctive and the primary lesion is a small, angular, flat-topped papule which may be discrete or gradually coalesce into large plaques. The oral lesions are highly variable and can be described as papular, annular, reticular, plaque, verrucous, atrophic, erosive, and ulcerative and vesiculo-bullous types<sup>2</sup>. The main symptom is burning sensation of the affected areas.

**II. OBJECTIVES**

To assess the clinical features of oral lichen planus with special emphasis on different types of oral lesions and their association with pigmentation. To find the histologic features in oral lichen planus and the histologic differences in different types of oral lichen planus. To correlate the clinical and histologic findings in different types of oral lichen planus. To assess the presence or absence of epithelial dysplasia in histologic preparations of different types of oral lichen planus.<sup>3</sup>

**III. MATERIALS AND METHODS**

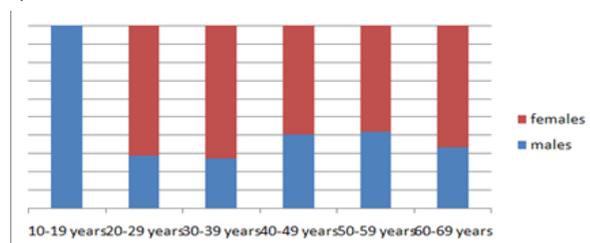
The samples for the study were obtained from the patients visiting the Department of Oral Pathology, *Kothiwal Dental College & Research Centre*. Those patients with oral lesions clinically suggestive of oral lichen planus were selected. The selected patients were questioned about the detailed medical history and history of presenting complaints followed by a general examination and clinical examination. Biopsy was performed on those patients who consented for the procedure.

**IV. RESULTS**

During a period of one year and two months, 72 patients with oral lichen planus were evaluated. Clinical data with regard to age, sex, site distribution, clinical types, presence or absence of pigmentation and association with skin lesions were recorded and evaluated. Biopsy was taken from each patient to correlate the clinical and histological features and thus to find out the histological features and thus to find out the histological differences in different clinical types of oral lichen planus. The results pertaining to the clinical and histological features are described below –

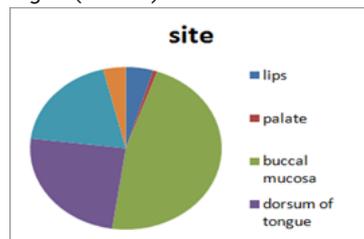
**SEX** – a definite female preponderance with a ratio of approximately 1:2 was noted. 47 cases were recorded in females and 25 cases in males. (Table 1)

**AGE** – the age of the patients varied between 18 and 65 years with maximum number of cases in the fourth decade. (Table 1)



**Table 1 –distribution of 72 cases of oral lichen planus according to age and sex.**

**SITE** – buccal mucosa is the most common site followed by dorsum of tongue. (Table 2)

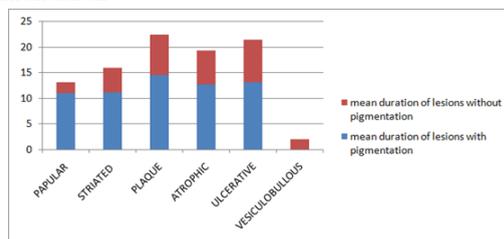


**Table 2 – site distribution of oral lichen planus in 72 patients.**

**Table 3- Associated Pigmentation In Oral Lichen Planus**

S No.	CLINICAL TYPE	TOTAL NUMBER	ASSOCIATED PIGMENTATION	%
1.	PAPULAR	7	1	14.2
2.	STRIATED	23	12	52
3.	PLAQUE	14	8	57
4.	ATROPHIC	13	8	61.5
5.	ULCERATIVE	14	10	71.4
6.	VESICULOBULLO	1	0	0
	<b>TOTAL</b>	<b>72</b>	<b>39</b>	<b>54.2</b>

**Table 4 – Duration of oral lichen planus with and without pigmentation**



## V. DISCUSSION

The clinical and histopathological features of oral lichen planus have been reported in literature from time to time. The current study of 72 cases of oral lichen planus showed similar results in many aspects and these are discussed below.

The present study showed a marked female predominance which is in accordance with previous reports<sup>3,4,5,6,1</sup>. The age range in this study was between 30-39 which is in accordance with studies conducted by Lacy et al<sup>7</sup> and Andreason et al. 61 cases occurred in buccal mucosa followed by dorsum of tongue<sup>8</sup>. This is in accordance with previous reports. Striated type of lichen planus constituted the maximum number of cases followed by atrophic and plaque varieties. This is in agreement with previous reports.

The symptom of burning sensation is the commonest feature which appears to be due to the presence of epithelial atrophy. Associated pigmentation is seen in 54% of cases and seems to be of post inflammatory in nature. Some clinical lesions similar to lichen planus showed features of malignant transformation, however in this study only two cases of mild dysplasia.

## VI. CONCLUSION

During a period of 1 year and 2 months 72 cases of oral lichen planus were studied to determine the clinical and histological parameters. Generally these findings were similar to earlier studies. But certain aspects both clinically as well as histopathologically were given special emphasis. The symptom of burning sensation appears to be the commonest feature. Associated pigmentation was seen in more than 54% of cases and was related to the duration and severity of the lesion. When the histologic features were studied it is suggested that the striated and popular types are histologically similar and also that the erosive types are histologically non-existent.

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