ORIGINAL ARTICLE

Prevalence of Oral Lichen Planus in out Patient Department of Dentistry ISRA University Hospital Hyderabad

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ABSTRACT

Objective: To know the prevalence of oral lichen planus (OLP) in out patient department of dentistry Isra University Hospital Hyderabad.

Study & Design: Observational.

Place & Duration: Department of Dentistry Isra University Hospital, Hyderabad from April 2009 to March 2012.

Material & Methods: A total of 167 patients with oral lichen planus were recruited. Information regarding the age, sex, family history, morphology and distribution of lesions, duration of illness, concomitant use of drugs, associated diseases was obtained on a proforma designed for the study, all patients gave written informed consent. Written information about the study was given to each patient before attending the clinic. All participants of the study undergo careful clinical evaluation including a full medical history and clinical examination to confirm the diagnosis of oral lichen planus.

Results: Out of 167 patients of OLP 89 (53.3%) were females and 78 (46.7%) were males (ratio=1.1:1). Most patients were in the age group between 35-45 years. Family history was negative in all patients. No history of any precipitating factors was noted. Mixed oral and mucous membrane lesions were seen in 81 (48.5%) patients. The majority of the patients (57.7%) have classical lesions followed, in order of frequency, by hypertrophic, eruptive, actinic, follicular, and atrophic types (19.8%, 18%, 9.6%, 7.2% & 3.0% respectively). Cheeks were the commonest site to be involved at onset (95 patients, 56.9%). Other sites at onset, in order of frequency, were: the lips in 33 patients (19%), especially the lower lip (23 patients, 13.8%), tongue (dorsum part) in 21 (12.5%), buccal cavity in 18 (10.8%), and upper lip in 10 (6%). Clearance of lesions occurred within 9 months in most cases with mild to moderate postinflammatory hyperpigmentation. No malignant transformation was noted.

Conclusion: Oral Lichen Planus is one of the common disease, seen in our Out Patient Department. The Isra University Hospital based study may give an idea about the clinical presentation of OLP in Out Patient Department of Dentistry. It's more common in females. Therefore it's the responsibility of family dentist to educate patients about available treatment options and their expected outcomes.

Key words: Lichen Planus, Oral Cavity, Incidence.

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INTRODUCTION:

Oral lichen planus (OLP) is a chronic inflammatory disorder of mucosal surfaces, current etiopathogenesis of 0LP is associated with cell mediated immunological dysfunction[1,2] spontaneous remissions are rarely seen. The disease is quite common, affecting approximately 1–2% of the population[1,3-5]. OLP, unlike cutaneous lichen planus (LP), is usually recalcitrant to treatment. OLP can be classified into three clinical types: white reticular, atrophic / erosive and

ulcerative. The erosive lesions hardly ever remit spontaneously and may lead to confusion with other vesiculo-bullous or autoimmune mucosal diseases which share similar clinical manifestations. The posterior buccal mucosa is the most common site of involvement, followed by the tongue, gingiva, labial mucosa and vermilion of the lower lip[6-10]. In general, all treatments aim at eliminating atrophic and ulcerative lesions and alleviating symptoms. Several topical and systemic treatments are available for patients with OLP but therapeutic responsiveness may differ between patients[11-13].

MATERIAL & METHODS:

In present study a total of 167 patients with oral lichen planus were recruited from a total of 22876 patients, who visited the outpatient clinic of the Department of Dentistry Isra University Hospital, Hyderabad from April 2009 to March 2012. Information regarding the age, sex, family history, morphology and distribution of lesions, duration of illness, concomitant use of drugs, associated diseases was obtained.

Local ethical committee approval was obtained before the trial started from the local research ethical committee, Isra University Hospital and all patients gave written informed consent. Written information about the study was given to each patient before attending the clinic. All participants of the study undergo careful clinical evaluation including a full medical history and clinical examination to confirm the diagnosis of oral lichen planus. Determination of whether the patient fulfils the inclusion / exclusion criteria. Written, witnessed informed consent was obtained and a copy given to the patient. They were assured that they can withdraw from the study, at any time, without being required to state a reason and this would not affect their future management. Assign the patient a study number.

Inclusion Criteria

The only inclusion criteria was:

(i) Clinical diagnosis of OLP.

Exclusion Criteria

There were no exclusion criteria.

Recording of Data

During the whole period of the study, the research data (recorded data) was entered in pre-designed proforma and data was analysed by using SPSS version II. No specific biostatistician test was applied.

RESULTS:

The 167 patients with OLP formed 0.73% of the total number of dentistry out patients in our study. Eighty nine patients (53.3%) were females and 78 (46.7%) were males (ratio=1.1:1). The maximum number of cases were presented in 36-45 age group, the demographic details are mention in Table-I. Family history of similar disease was negative for all patients. There was no history of any precipitating factors. The involvement of oral lesions alone was observed in 167(100%) patients. Concomitant involvement of both oral and mucous membranes was seen in 81 (48.5%) patients. The majority of the patients (57.5%) showed classical lesions followed, in order of frequency, by hypertrophic, eruptive, actinic, follicular, and atrophic types (19.8%, 18%, 9.6%, 7.2% & 3.0% respectively) some of the patients were presented with more then one lesion (Table 2). Cheeks were the commonest site to be involved at onset (95 patients, 56.9%). Other sites at onset, in order of frequency, were: the lips in 33 patients (19.8%), especially the lower lip (23 patients, 13.8%), tongue (dorsum part) in 21 (12.5%), buccal cavity in 18 (10.8%), and upper lip in 10 (6%) (Table 3).

Table -1: Demographic Data

Gender	**N**	**%**
Male	78	46.70
Female	89	53.30
Age (years)		
25-30	10	5.98
31-35	20	11.97
36-45	112	67.07
> 45	25	14.97

Table 2. Various presentation of OLP

Type of OLP	N	%
Oral lesion	167	100
Oral mucous membrane	81	48.5
Classical Lesion	96	57.5
Hypertrophic	33	19.8
Eruptive	30	18.0
Actinic	16	9.6
Follicular	12	7.2
Atrophic	5	3.0

Table 3. Sites involved by OLP lesions (n=167)

Sites	N	%
Cheek	95	56.9
Upper Lip	10	6.0
Lower Lip	23	13.8
Tongue (dorsum)	21	12.5
Buccal Cavity	18	10.8

DISCUSSION:

In our study, the prevalence of OLP was 0.73% with almost equal involvement of both sexes. The most common age group affected was 36-45 years. No familial cases were noticed. These epidemiological data are consistent with other studies held in other countries[14-16]. No factors were noted to be significantly associated with OLP, which confirms the idiopathic nature of this disease[17].

Our study reveals that the cheeks (56.9%), lips (19.8%) especially lower lips (13.8%), are common sites involvement with the classical type being the most common morphologic type (57.5%). These results are consistent with literature[18,19]. Hypertrophic and Eruptive LP showed higher prevalence 19.8% and 18.0% respectively most international figures, which is the case in most Middle East countries, mostly due to higher sun exposure[20,21]. Association of mucosal and skin diseases was seen in 48.5% of patients. Buccal mucosa was the commonest mucosal surface to be involved with the reticular type being the commonest morphologic subtype.

Upper lip lichen planus was encountered in about 6.0% of cases. These results are consistent with the epidemiological and clinical features of mucosal LP in most studies[15,16,22-24]. The disease, in our study runs a course of few months (9 months in average) No malignant transformation was noted. The epidemiological and clinical setup of OLP in our study did not show significant differences from that written in literature. The hospital in which this study was carried out, is one of the biggest two hospitals in the Hyderabad which caters for about 60% of Hyderabad population. So, this hospital based study may give good idea about the features of OLP in our Country. However, there is a need for further studies, in other hospitals and provinces of Sindh to give better idea about the features of the disease in Pakistan. Therefore it's the responsibility of family dentist to educate patients about available treatment options and their expected outcomes.

CONCLUSION:

The current study may give an idea about the clinical presentation of OLP. It's more common in females as compare to males, with higher prevalence of hypertrophic type. The epidemiological & clinical features of the disease are similar to those mentioned in the literature.

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