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GINGIVAL INVOLVEMENT OF ORAL LICHEN PLANUS IN 263 PATIENTS Pinto AC*, Cardoso I*, Henriques I*, Montenegro R*, Trancoso P*, Azul A* * Clínica Integrada de Medicina Oral, Lisbon, Portugal



Oral Lichen Planus (OLP) is the most common autoimmune disease of the oral mucosa (prevalence between 0.1 and 4%¹) presenting different clinical manifestations and intraoral locations. Gingival involvement either with erithematous, atrophic, erosive or ulcerative presentations (also called "desquamative gingivitis" – OLP DG) may pose problems for differential diagnosis mainly with periodontal disease and for a correct therapeutical approach.

The goal of this study was to analyze the prevalence and clinical aspects (location, morphology and symptoms) of the gingival lesions in a total of 263 patients with OLP, identified in a prevalence study of a Portuguese dental clinic (9595 subjects) and comparing these results with published international data.

MATERIALS AND METHODS

Retrospective, observational, transversal and comparative study by analysis of 9595 patient records, dated between 2005-2016, where 1698 cases of oral pathology were identified, 263 of those with OLP. Descriptive, inferential statistical analysis (Chi-Square with significance level 5%) was performed.

RESULTS

- The prevalence of OLP in our population was 2.7% (9595 subjects), affecting \bullet 28.5% males (n=75) and 71.5% females. These patients were aged between 23 and 100 years old (mean age of 63 years) (see Table 1);
- 99 of the 263 patients with OLP showed gingival involvement (37.6%). 80 were women (80.8%) and 19 were men (19.2%);
- Gingival erithematous/ulcerative/erosive OLP lesions ("desquamative gingivitis") were diagnosed in 91 patients (34.6% of the OLP population and 91.9% of the OLP population with gingival involvement) (see Table 1):
 - 46.2% affected both upper and lower gingiva and 71.4% in a bilateral way;
 - \diamond The symptoms, if present, varied from mild discomfort to severe oral pain, with the general trend increasing from the white to erosive forms;
 - \diamond This form of OLP (OLP DG) coexisted with other intraoral sites in 91.2% of the cases: reticular lesions occured in 52 cases; plaque lesions were found in 33 cases and erosive forms in 47 cases; only in 8.8% of patients showing gingival erithematous/ulcerative/erosive OLP lesions no other sites of oral involvement could be identified.
- None of our oral cancer cases was associated with previous gingival OLP lesions.

DISCUSSION

Table 1: Study General Data (* Statistically significant differences for p < 0.05).</th>

<i>n</i> total (%)	<i>n</i> Male (%)	<i>n</i> Female (%)	Age
263 (2.7)	75 (28.5)*	188 (71.5)*	23-100 (63
91 (34.6)	14 (15.4)*	77 (84.6)*	24-89 (64)
	<i>h</i> total (%) 263 (2.7) 91 (34.6)	h total (%) h Male (%) 263 (2.7) 75 (28.5)* 91 (34.6) 14 (15.4)*	<i>n</i> total (%) <i>n</i> Male (%) <i>n</i> Female (%) 263 (2.7) 75 (28.5)* 188 (71.5)* 91 (34.6) 14 (15.4)* 77 (84.6)*



Figures 1, 2, 3: Clinical aspects of 3 patients examined.

The OLP prevalence in our population is 2.7%. In recent studies carried outside of Europe rates of 0.98%, 0.8% and 0.8% were reported^{2,3,4}. However, this studies have different

diagnosis criteria (with 55 years of records², for example) or age groups that are not typical for OLP (since 1 year old³, for example).

The only large european and truly epidemiological study is dated from 1976 (Axéll T) and reported a OLP prevalence of 1.85% (1.6% in males and 2.3% in females)⁵. The validity of this study is also refered by McCartan and Healy⁶.

The prevalence of OLP DG in our study is similar to the one reported by Mignona et al. (2005)⁷ (34.6% and 36.14%, respectively) and much higher than those reported by some other authors^{8,9}. This fact could be related with the different classification criteria of this pathology.

The comparison of our results with published international data is presented below in Table 2.

Table 2 (Legend: * G – OLP: Oral Lichen Planus with gingival involvement; ** OLP DG: Gingival erithematous/ulcerative/erosive Oral Lichen Planus "Desquamative gingivitis".)

Author Date	Journal	Methods	OLP (n)	Female - Male % (racio)	Age Min – Max (Average)	Gingival OLP (G - OLP)
Pinto AC, Cardoso I, Henriques I, Montenegro R <i>et al.</i> (2016)		Retrospective study	263	71.5% - 28.5% (3:1)	23-100 (63)	37.6% G – OLP*; 34.6% OLP DG** 8.8 % OLP DG with no other intraoral locations
Mignogna MD ⁷ (2005)	J Clin Periodontol	Clinical Exam	700	60% - 40% (2.1:1)	18-83	48% G – OLP *; 36.14% OLP DG ** 15% OLP with no other intraoral locations
Radochová V <i>et al</i> . ⁸ (2014)	J Clin Exp Dent	Retrospective Study	171	67.8% - 32.2% (2.1:1)	20.9 -85 (55.2)	12.9% OLP DG **
Budimir V <i>et al</i> . ⁹ (2014)	Med Oral Patol Oral Cir Bucal	Retrospective Study	563	73.5% - 26.5% (2.8:1)	19-94 (67.12)	19.7% G – OLP *
Bermejo-Fenoll A <i>et al</i> . ¹⁰ (2009)	Oral Oncology	Retrospective Study	550	76.7% - 23.3% (3.3:1)	(56.35)	Does not mention
Lauritano D <i>et al</i> . ¹¹ (2016)	Head and Face Medicine	Retrospective Study	87	64.4% - 35.6% (1.8:1)	27-93 (63.9)	23% G – OLP*

CONCLUSION

OLP affects between 1-3% of the occidental population and mostly females (in our study 2.7% and 72%, respectively). Nearly 35% of our patients with OLP present gingival erithematous/ulcerative/erosive OLP lesions (proportion female-male 3:1). Additionally, 8.8% of those with OLP DG had no OLP lesions in other intraoral locations, making differential diagnosis of those conditions, as well as a correct treatment, difficult for the general practitioner. Unlike periodontal disease, when the treatment for OLP is required, immunosuppressants are indicated. Thus, differential diagnosis with periodontal diseases is important and periodontologists should be familiar with the most common clinical aspects of gingival OLP.



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