

PSYCHIATRIC DISORDERS IN ORAL LICHEN PLANUS: A PRELIMINARY CASE CONTROL STUDY

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The aim of this study was to evaluate the prevalence of psychiatric symptoms in patients with oral lichen planus (OLP) compared to a control group. 11 patients (mean age 65.2 years-old), with diagnosis of OLP and 13 controls (mean age 64.8 years-old) underwent a psychiatric evaluation with five psychometric scales: Visual Analogue Scale (VAS), Hamilton Rating Scale for Depression (HAM-D), State-Trait Anxiety Inventory (STAI 1-2), Distress Thermometer (DT) and Brief Fatigue Inventory (BFI). Seventy-three % of OLP group presented a VAS score of mild type; 9% had depressive symptoms; 100% of the sample had a score above the cut-off for state and trait anxiety; 45% presented Distress (36% moderate type). However, no statistical difference was found in comparison with the control group. In this study, there was no difference in these parameters between the OLP group and the control group. Perhaps, a larger cohort of patients could give different results.

Oral Lichen planus (OLP) is an idiopathic inflammatory disease of mucous membranes, characterized by an autoimmune epithelial attack by infiltrating T cells. The disease has a predominance in the general population of 1-2%, 50% of which has both skin and oral lesions, while 25% of patients shows only oral lesions (1). The oral sites generally involved are buccal mucosa, tongue and gingiva (2). Extra-oral sites (i.e. scalp, skin, nails, conjunctiva, esophagus, larynx urethra, vulva and vagina, and perianal area) are commonly involved (3). It results in severe morbidity; thus, a multidisciplinary approach is needed (4). It should be noted that the mechanisms underlying

this pathology are still discussed (5). For example, psychological disturbances could play a role in the onset of OLP (6-12) as in other oral mucosa diseases (13,14) but the results are conflicting(15). In particular, the psychiatric comorbidities most frequently discussed in the literature were stress or stressful events (16,17), anger suppression (18) anxiety (6,19), depression (4,8). In addition, the quality of life of patients with OLP was analyzed and in this context, an analysis of the burning and pain symptoms was made through the VAS scale. The purpose of this preliminary case control study is to verify the prevalence of psychiatric disorders in a sample of patients with OLP through

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the administration of five psychometric scales. Furthermore, the symptom pain in patients with OLP was assessed with the VAS scale.

MATERIALS AND METHODS

This study evaluated 24 patients attended at the Oral Pathology Clinic of the University of Campania “Luigi Vanvitelli”. The OLP group consisted of 11 patients, 10 women and 1 man. The control group consisted of 10 women and 3 men. The study was approved by the local Human Research Ethics Committee. All participants provided signed informed consent forms.

Inclusion and exclusion criteria

To be included in the study, patients had to have a diagnosis of OLP (all forms). Patients were excluded if they had Burning Mouth Syndrome, systemic problems, including use of drugs like tricyclic antidepressants and anticholinergics. The control group consisted of patients seen in the Dental Clinic of Second University of Naples in the Department of Oral Pathology.

Assessment

The study group and the control group were evaluated by collecting demographic data, and medical history; the administration of psychiatric scales was preceded by an examination of the oral cavity.

Visual analogue scale (VAS) was used to assess the intensity of the pain (20, 21). For the prevalence and intensity of depressive symptoms Hamilton Depression Rating Scale (HAM-D) was used (22). The assessment of anxiety symptoms was performed using the STAI (State-Trait Anxiety Inventory) Form Y (23). A Distress Thermometer (DT) (24) was administered for the emotional distress in a chronic disease. Brief Fatigue Inventory (BFI) was used to evaluate the fatigue (25).

A database was assembled using Microsoft Excel and elaborated with R[®]. Demographic and clinical features of the two groups as well as the results of psychometric variables were recorded.

RESULTS

Both groups did not differ in gender distribution or age (mean age 66.6 years-old OLP; 63.5 years-

old controls). There are no significant differences between the two groups regarding depression ($p>0.05$). In fact, 9% of patients with OLP have mild depressive symptoms, compared to 13% of the control group that also has a 4% of severe symptoms. Furthermore, if it is true that 100% of the group with OLP exceeds the cut-off (40) for state and trait anxiety, this also occurs in the control group ($p>0.05$). Only 1 patient (9%) with OLP has severe fatigue, while in the control group 15% have mild fatigue and 23% moderate fatigue. Forty-five % of patients with OLP have Distress, of which 36% are moderate and 9% are severe; in the control group, only 30% have distress values for 15% moderate and for 15% severe. However, comparing the groups with an unpaired *t*-test there is no significant difference ($p>0.05$). Only VAS score is significantly higher in patients with OLP than in the control group ($p<0.05$), and in particular 73% have mild pain, while 61.5% of the control group report no pain (Fig. 1).

DISCUSSION

In this preliminary study, there do not seem to be any differences in psychometric test results between patients with OLP and control group. In fact, even if 100% of the study group has high values of state and trait anxiety, there seems to be no difference compared to the control group. The data reported in this study appear to be in line with some previous work (12, 15). For example, the results provided by Allen and coworkers (15) indicate that no difference exists among OLP group and controls respect the tendency toward anxious feelings; even Alshahrani et al. in a cross-sectional study admits that despite reports of positive association, evidence on psychological factors and OLP remains inconclusive (12). In contrast, Gavic et al. (19) as well as Chaudhary et al. (6) have shown a prevalence of anxiety and depressive disorders in patients with OLP. As for the other parameters, such as fatigue and depression measured in the two groups, we have higher values in the control group even if there is no significant difference. These data are in contrast with previous work (8, 11, 26). As far as distress

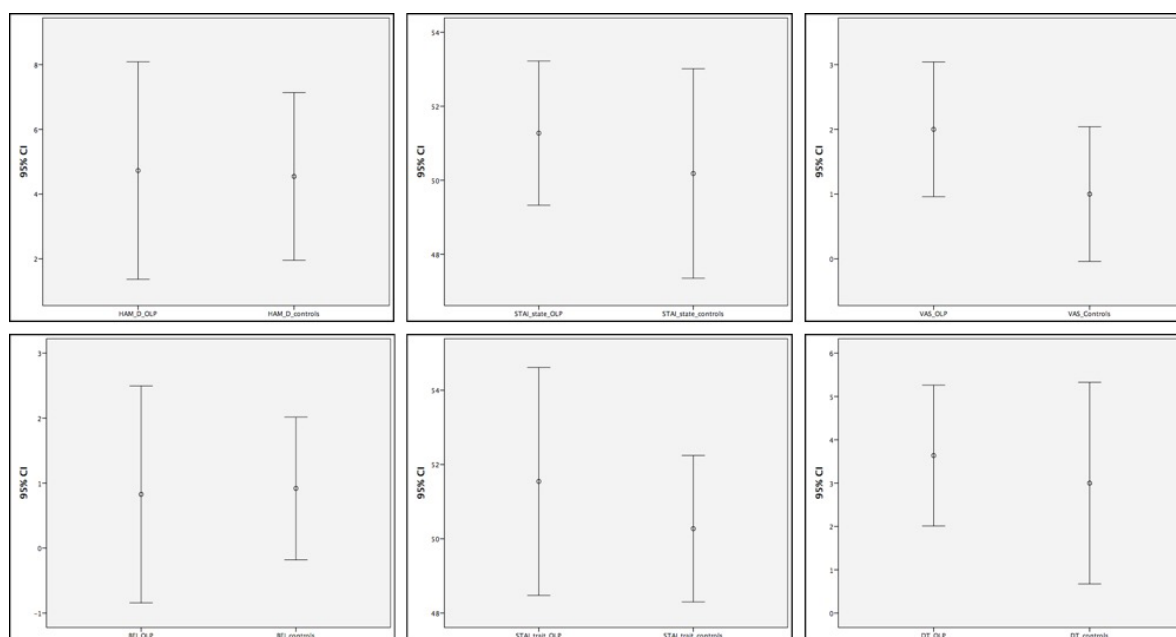


Fig. 1. Error Bars. When OLP group was compared to controls, only VAS results significantly higher in OLP group.

is concerned, there seems to be greater prevalence in the OLP group, although not significant. Other studies have analyzed the “stress” or even better the “stressful events” (16, 17, 27) but not the “distress”. In any case, a study with a larger sample could be useful in determining the prevalence of these psychometric values in the OLP.

CONCLUSION

In this study, patients with OLP have elevated levels of anxiety and distress, although not significant compared to controls. Only VAS score is significantly higher in patients with OLP. Studies with a larger cohort of patients can better clarify the role of psychiatric comorbidities in oral lichen planus.

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