# Evaluation of Depression, Anxiety and Stress in Patients of Oral Lichen Planus

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<sup>1</sup>Dr. Prasad Karande, <sup>2</sup>Dr. Abhijeet Sande, <sup>3</sup>Dr. Paulami Bagchi, <sup>4</sup>Dr. Prashant Rao, <sup>5</sup>Dr. Ashwini Nerkar Rajbhoj, <sup>6</sup>Dr.Anagha Shete

<sup>1</sup>Professor and Head, Department of Oral Pathology, D. Y. Patil Dental School, Lohegaon, Pune, Maharashtra, India

<sup>2</sup>Reader, Department of Oral Medicine and Radiology, D. Y. Patil Dental School Lohegaon, Pune, Maharashtra, India

<sup>3</sup>Professor, Department of Prosthodontics & Crown and Bridge, D. Y. Patil Dental School, Lohegaon, Pune, Maharashtra, India

<sup>4</sup>Associate Professor, Bharati Vidyapeeth Deemed to be University Dental College and Hospital, Pune, Maharashtra, India

<sup>5</sup>Senior Lecturer, DY Patil Dental School Lohegaon, Pune, Maharashtra, India

<sup>6</sup>Professor, Department of Oral Medicine and Radiology, D Y Patil Dental school Lohegaon Pune, Maharashtra, India

### Corresponding author: Dr. Abhijeet Sande

Reader, Department of Oral Medicine and Radiology, D. Y. Patil Dental School Lohegaon, Pune, Maharashtra, India

Email: sandeabhijeet@gmail.com

#### **Key words**

Oral lichen planus, Anxiety, Stress

#### **Abstract**

Background: A Common disorder of the stratified squamous epithelia is Lichen planus that affects the scalp, skin, nails, and mucosa. Today's study conducted to evaluate anxiety, depression & stress in patients of oral lichen planus.

Materials & Methods: 40histological cases with confirmation of oral lichen planus of both genders were categorised into 2 groups. Group I comprised of OLP cases (40) & Group II had healthy control subjects (40). DASS-42 questionnaire consisting of 42 symptoms was used for assessment.

Results: Group I take 15 males and 25 females whereas, group II take 20 males and 20 females. The mean depression score in Group-I = 6.8 and in group II = 3.5, anxiety seen in group I = 7.9 and in group II=4.3 & stress score in group I = 11.7 and in group II=6.2. The difference was significant (P<0.05).

Conclusion: DASS-42 found to be reliable & useful for evaluating anxiety, depression, & stress. Psychiatric assessment is accepted for patients of oral lichen planus.

### 1. Introduction

Lichen planus isn't considered to be a contagious illness. It is categorised as an autoimmune condition with an

undiscovered origin that could be triggered by psychological stressors. Individuals having this disease go through stressful

situations prior to the development of the disorder, and they also have greater degrees of anxiety and salivary cortisol. Scalp, skin, nails, and mucosa are all commonly affected by the stratified squamous squamous epithelium condition known as lichen planus. 2 Studies have shown psychological stress causes killer T cells and macrophages, either of which are crucial for immunological responses associated with the skin, to be suppressed. Disturbed skin may be a sign of repressed anger or internal conflict brought on by stress from the outside world since, psychologically speaking, the skin is regarded to be both an erogenous part and a conduit for emotional discharge. 3 Lovibond & Lovibond established the Depression Anxiety Stress Scale, a forty two-item self-report tool for measuring depression, anxiety, and stress. To govern, no specialised knowledge is required. The 3 DASS subscales are interrelated to each other in different ways.4 General anguish is non-specific component of depression and anxiety. Constant stress, irritability, a poor threshold for frustration or anger and a propensity to over-react to distressing situations are signs of DASS

Stress.<sup>5</sup> This research assessed OLP (oral lichen planus) sufferers as well as those with depression, anxiety, and stress.

#### 2. Materials & Methods

Today's study consisted of 40histological cases of confirmation of oral lichen planus of both genders. Written consent taken from all patients for the participation in the study.

Data that includes name, age, gender etc. was recorded. Patients were categorized into 2 groups. Group I comprised of OLP cases (40) and group II took healthy control subjects (40). A thorough oral and examination systemic performed.DASS-42 inquiy consisting of 42 symptoms detached into three subscales of 14 parts: Depression scale & anxiety scale, & stress scale was used for appraisal. Subjects rated the range at which point they had experienced each symptom over the last week on a 4 points scale ranging from 0 [acted not apply to me by any means] to 3 [applied to me extremely, or most of the time].Data thus acquired were commit to statistical analysis. P value < 0.05 was captured considerably.

### 3. Results

Table I: Patients' Distribution

| Groups | Group I            | Group II         |
|--------|--------------------|------------------|
| Status | Oral lichen planus | Healthy subjects |
| M:F    | 15:25              | 20:20            |

Table I shows that group I had 15 males and 25 females and group II had 20 males and 20 females.

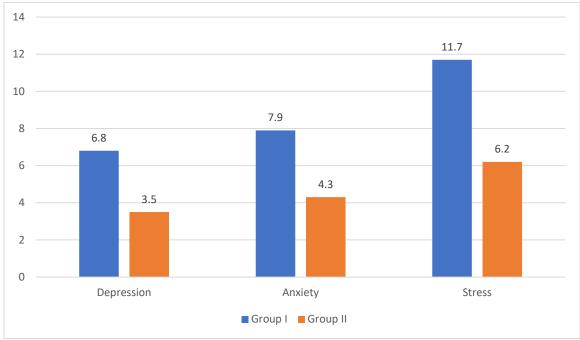
Table II: Assessment of DASS in this groups

| DASS       | Group I | Group II | P value |
|------------|---------|----------|---------|
| Depression | 6.8     | 3.5      | 0.02    |
| Anxiety    | 7.9     | 4.3      | 0.04    |
| Stress     | 11.7    | 6.2      | 0.01    |

Table II, graph I finds that mean depressionscore in group I=6.8 and in group I=3.5, anxiety in group I=7.9 and

in group II = 4.3 and stressscore in group I = 11.7 and in group II = 6.2. The difference was significant (P< 0.05).

**Graph I: Assessment of DASS in these groups** 



### 4. Discussion

Approximately one percent to four percent of the individual are affected by OLP, a prevalent chronic inflammatory, psychomucocutaneous condition which has concomitant psycho-neuroendocrine and psycho-immunological abnormalities.<sup>6</sup> Both genders are affected, and it can occur at any period of life. Women are more likely to experience oral mucosal and genital interference.<sup>7</sup> It is regarded as a persistent condition that confounds both sufferers and practitioners. The first being

Andreasen, who noted in 1968 that OLP sufferers sought to be in stressful, anxious, as well as depressed environments.<sup>8</sup> <sup>9</sup> Several dermatological conditions serve as examples in the subject that describes the skin as the "shock organ" for emotional burdens. According to clinical findings, psychological stress may cause, aggravate, or exacerbate a variety of dermatological conditions as well as the psychosomatic manifestations of a variety of illnesses. <sup>10</sup> This research was carried out to seek

anxiety, depression as well as stress among subjects having OLP.

We discovered that group I contained fifteen men as well as twenty five women, while group II contained twenty men whereas twenty women. In subjects experiencing OLP, Porras-Carrique D et al11 evaluated the occurrence of depression, anxiety and stress. The occurrence of sadness, anxiety, as well as stress in this condition was found to be extremely increased. For depression, anxiety, and stress, subjects demonstrated a significantly greater relative frequency in the OLP-free control sample. significance of psychologists as well as psychiatrists in the identification of depression, anxiety, as well as stress among OLP subjects was demonstrated by subgroups meta-analyses.

We noted that the average depression score in group I was 6.8, the anxiety rating was 7.9, the stress rating was 11.7, whereas the stress score in group II was 6.2. Forty OLP sufferers were matched to forty competent controls by Hiremutt et al<sup>12</sup>. In a cohort comprising forty OLP patients, twenty received an "active" treatment, such as cyclosporine oral solution (Group A), and remaining Twenty received "placebo" intervention (Group P). At the completion of treatment, all 20 members of Group A received the HADS question, as did all 20 members of Group P. The survey consisted of fourteen items, seven of which were about anxiety whereas the remaining seven were about depression.

Individuals suffering from oral lichen planus had higher levels of anxiety and depression than those without OLP. In comparison to eight, fourteen subjects experienced less anxiety following the active treatment. According to the occurrence of depression among OLP sufferers prior to as well as after receiving "active" treatment, one mild as well as nine frank cases of depression among all twenty subjects decreased to one as well as four mild cases after receiving active treatment. 5 of the subjects had their depression fully alleviated.

In individuals having OLP, depression, anxiety, and stress concentrations were evaluated by Kalkur et al<sup>13</sup> The DASS was used in the psychometric analysis, as well as the same researcher administered forty **OLP** questionnaires to both participants as well as controls. The depression scale, the anxiety scale, and the stress scale are 3 subscales of DASS-42 questionnaire, which has forty two complaints in total. When opposed to the control sample, lichen planus subjects had incidence of psychiatric greater conditions like depression, anxiety, as well stress, according to psychological testing employing the DASS-42.

Both cohorts showed considerably greater degrees of stress, anxiety, as well as depression as compared to the general community, according to Chaudhary<sup>14</sup>. Therefore, psychological stressors are crucial in the development of oral lichen planus.

According to Sawant et al.'s assessment of the occurrence rate of depression and subject' lifestyle, twenty five percent of subjects had depression, with women getting more affected as compared to men. Over ninety percent of subjects had poor lifestyle.

Greatest damage had been caused by manifestations as well as sickness feelings, everyday interrupted activities, employment and treatment-related time commitments. In both the males and there existed significant women. a depression correlation among deterioration in lifestyle. This research assists in the initial identification of psychological issues among lichen planus sufferers as well as the future planning of treatment strategies, hence lowering lack of productivity as well as enhancing prognosis as well as lifestyle.

Smaller sample size remains the study's main flaw.

### 5. Conclusion

Authors found that DASS-42 is a reliable & helpful for evaluating depression, anxiety, and stress. Psychiatric assessmentis considered for patients with oral lichen planus.

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