


**ORIGINAL ARTICLE****Assessment of Oral Lesions in Patients with Anxiety and Depression in Jammu Population**Mamta Sharma<sup>1</sup>, Mohammad Shafi Dar<sup>2</sup>, Nimmi Singh<sup>3</sup>, Devika Singh<sup>4</sup><sup>1</sup>Dental surgeon, Department of Oral Medicine and Radiology, <sup>2</sup>Lecturer, Oral Pathology, IGGDC, Jammu, <sup>3</sup>Reader, Department of Oral Medicine and Radiology, Buddha Institute of Dental Sciences & Hospital, Patna, <sup>4</sup>Senior resident, Department of oral medicine and radiology, Indira Gandhi Institute of Medical Sciences, Patna,**ABSTRACT:****Background:** A psychosocial disorder is a mental illness caused or influenced by life experiences, as well as maladjusted cognitive and behavioural processes. Literature quotes numerous studies highlighting prevalence of oral lesions in patients with psychiatric disorders. Hence; we planned the present study to assess the prevalence and pattern of oral mucosal lesions in anxiety and depression patients in Jammu population. **Materials & method:** The present study included assessment of prevalence of oral mucosal lesions in patients with anxiety and depression. A total of 120 patients were included in the present study who reported with chief complaint of psychiatric illness, chiefly anxiety and depression. Complete oral examination was done in all the patients. Pattern, prevalence and site of occurrence of oral lesions in all the patients were recorded on an excel sheet. **Results:** 18, 7 and 5 patients were found to be suffering from recurrent aphthous stomatitis (RAS), Oral Lichen Planus (OLP) and Burning mouth syndrome (BMS). Total prevalence of oral lesions was found to be 12 percent. **Conclusion:** Oral lesions are prevalent in significant amount in subjects suffering from psychiatric disorder.**Key words:** Anxiety, Depression, Oral lesions

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**INTRODUCTION**

The modern era has seen an unprecedented rise in the incidence of disorders affecting the human psyche. The term "psychosocial" refers to the psychological and social factors that influence mental health. A psychosocial disorder is a mental illness caused or influenced by life experiences, as well as maladjusted cognitive and behavioral processes.<sup>1-4</sup> This mental illness is not a single condition nor do patients suffering from such disorders form a homogeneous group in the society. It is indeed a continuum, ranging from minor distress to severe disorders of mind and behavior. It affects people of all nations and of socioeconomic strata.<sup>5-7</sup> Hence; we planned the present study to assess the prevalence and pattern of oral mucosal lesions in anxiety and depression patients in Jammu population.

**MATERIALS & METHODS**

The present study included assessment of prevalence of oral mucosal lesions in patients with anxiety and depression in Jammu population. A total of 120 patients were included in the present study who reported with

chief complaint of psychiatric illness, chiefly anxiety and depression. Patients with past history of psychiatric illness and family history of psychiatric illness were excluded from the present study. We also excluded patients with any known drug allergy, patients with history of any drug usage in the past six months and patients with any systemic illness from the present study. Only those patients were included in the present study who were diagnosed with suffering from anxiety and depression as demonstrated with Hamilton Anxiety and Depression scale by a senior psychiatrist. Complete oral examination was done in all the patients. Ethical approval was taken before the starting of the study and written consent was obtained from all the patients after explaining in detail the entire research protocol. Pattern, prevalence and site of occurrence of oral lesions in all the patients were recorded on an excel sheet. All the results were analyzed by SPSS software. Chi- square test was used for assessment of level of significance. P- value of less than 0.05 was taken as significant.

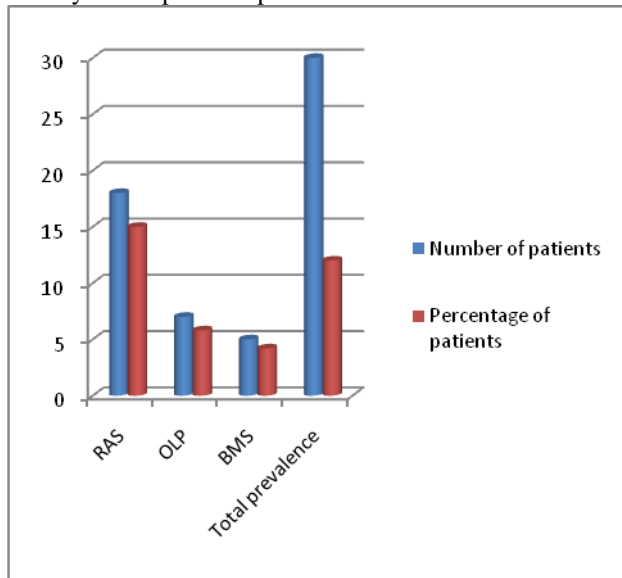
**RESULTS**

In the present study, we included a total of 120 patients. Out of 120, 70 were males and 50 were females. Out of these 120 patients, 18, 7 and 5 patients were found to be suffering from recurrent aphthous stomatitis (RAS), Oral Lichen Planus (OLP) and Burning mouth syndrome (BMS). Total prevalence of oral lesions was found to be 12 percent.

**Table 1:** Prevalence and pattern of oral lesions among anxiety and depression patients

Oral lesion	Number of patients	Percentage of patients
Recurrent aphthous stomatitis (RAS)	18	15
Oral Lichen Planus (OLP)	7	5.8
Burning mouth syndrome (BMS)	5	4.2
Total prevalence	30	12

**Graph 1:** Prevalence and pattern of oral lesions among anxiety and depression patients



**DISCUSSION**

In the present study, we observed that oral lesions were present in 30 percent of the patients suffering from anxiety and depression (**Table 1, Graph 1**). Suresh KV et al evaluated the prevalence of different Oral Mucosal diseases in Anxiety and Depression patients. A hospital based observational Study was conducted in the department of Psychiatry and department of Oral Medicine and Radiology. Patients who were diagnosed with Anxiety or Depression by the psychiatrists using Hamilton Anxiety and Depression scale were subjected to complete oral examination to check for oral diseases like Oral Lichen Planus (OLP), Recurrent Aphthous Stomatitis (RAS), and Burning Mouth Syndrome (BMS). Equal number of control group subjects were also included. In this study statistically significant increase in the oral diseases in patients with anxiety and depression than the control group was recorded. Oral diseases were

significantly higher in anxiety patients (20.86%) than in depression (9.04%) and control group patients (5.17%). In anxiety patients, the prevalence of RAS was 12%, OLP was 5.7%, and BMS was 2.87%. In depression patients, the prevalence of RAS was 4.02%, OLP was 2.01% and BMS was 3.01%. In control group the prevalence was 2.2%, 1.33% and 1.62% in RAS, OLP and BMS respectively. RAS and OLP were significantly higher in the younger age group (18-49) and BMS was seen between the age group of 50-77 years in both study and control groups. The results of the present study showed a positive association between psychological alterations and changes in the oral mucosa, particularly conditions like OLP, RAS and BMS. Thus psychogenic factors like anxiety and depression may act as a risk factor that could influence the initiation and development of oral mucosal diseases. Hence psychological management should be taken into consideration when treating patients with these oral diseases.<sup>8</sup> Gavic L et al investigated the role of anxiety, depression, and psychological stress in occurrence and intensity of symptoms in RAS and OLP patients. A total of 110 patients with RAS in the acute phase and 112 patients with OLP also in acute phase participated in this study. All patients filled out questionnaires related to the primary disease (RAS/OLP) after which they took the following psychological tests: Beck Depression Inventory (BDI), The State-Trait Anxiety Inventory (STAI), and Ways of Coping Questionnaire (WCQ). According to multiple regression analysis, in patients with RAS, the highest correlation was found between results of the pain intensity and STAI test ( $\beta = 0.66$ ;  $p < 0.000$ ). In the patients with OLP, the highest correlation was found between the level of hyperkeratosis and WCQ test ( $\beta = 0.53$ ;  $P < 0.000$ ), inflammation and results of BDI test ( $\beta = 0.33$ ;  $P < 0.002$ ), and results of dynia test and STAI test ( $\beta = 0.31$ ;  $P < 0.004$ ). In this study, a high correlation between anxiety, depression, and psychological stress with symptoms of RAS and OLP has been observed.<sup>9</sup> Suresh KV et al investigated the different oromucosal diseases (OMD) in psychiatric patients and evaluated the correlation between these OMD to severity of anxiety and depression. Patients reporting to psychiatry department with anxiety, depression, schizophrenia and bipolar disorder as diagnosed by an experienced psychiatrist, were subjected to complete oral examination by a skilled oral diagnostician to check for OMD like oral lichen planus (OLP), aphthous stomatitis (AS) and burning mouth syndrome (BMS). During the above mentioned time interval, 1320 patients with any of the above mentioned psychiatric diseases were included in this study. Of these, 278 had anxiety, 398 had depression, 295 had schizophrenia and 349 had bipolar disorder. In this study, statistically significant increase in the OMD of the psychiatric patients was recorded when compared with the control group. The OMD were significantly higher in patients with anxiety (20.86%) followed by patients with depression (9.04%), schizophrenia (7.7%), bipolar disorder (7.4%) and control group (5.17%), respectively. Most prevalent OMD in patients with anxiety was AS

(12%) followed by OLP (5.7%), and BMS (2.87%) respectively. Patients with moderate to severe anxiety and depression showed significantly higher prevalence of these OMD compared to the ones with mild anxiety and depression. The AS and OLP were significantly more in the younger age group (18-49 year) and BMS was higher in 50-77 year age group in both the study and control groups. A positive association was established between psychological alterations and OMD. Emotional alterations may act as a precipitating factor that could influence the initiation and development of different OMD.<sup>10</sup>

### CONCLUSION

From the above results, the authors concluded that oral lesions are prevalent in significant amount in subjects suffering from psychiatric disorder. However; we recommend future studies for better exploration of the results

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