

Prevalence of Oral Diseases in Stress Related Disorders- An Original Research

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ABSTRACT:

Background: Oral health is important for patients with special needs such as psychiatric patients. Oral lesions are significantly seen higher in individuals with anxiety and depression than the normal healthy individuals with sound mind and body. These symptoms are thought to be of mental or emotional origin. These psychosomatic appearances are altogether high in dental patients.

Aims and objective: The target of this investigation was to assess the prevalence of various Oral Mucosal diseases in Anxiety and Depression patients.

Materials and methods: An emergency clinic based observational Study was directed in the department of Psychiatry and branch of Oral Medicine and Radiology. Patients who were determined to have Anxiety or Depression by the specialists utilizing Hamilton Anxiety and Depression scale were exposed to oral assessment to check for oral lesions like Oral Lichen Planus (OLP), Recurrent Aphthous Stomatitis (RAS), and Burning Mouth Syndrome (BMS) etc. Equivalent number of control subjects were likewise included.

Result: A sum of 225 patients (age 20 -65 years) having anxiety or depression were incorporated in study. Old age was related with lower level of stress and anxiety. Lichen planus is a relatively common dermatoses that affects the oral mucosa. It was discovered that lichen planus and burning mouth syndrome were more common in females and myofascial pain disorder was predominant in males. Xerostomia was found to increment with age.

Conclusion: Psychogenic components like stress and anxiety may go about as a risk factor that could impact the commencement of oral mucosal infections. Subsequently psychological management should be taken into consideration while treating patients with these oral diseases.

Key words: Lichen planus, anxiety, depression, burning mouth syndrome (BMS), recurrent aphthous stomatitis (RAS).

INTRODUCTION:

Our mouth is the reflection of our wellbeing and it very well may be said that various diseases which influence our body might be showed in the mouth.¹ It's significant not exclusively to perceive the signs can achieve changes in oral health, yet additionally to treat the condition and calm the stress related with welcoming on the condition. It is vital for a dental specialist to perceive early notice signs in anticipating the diseases. These are circumstances or exercises which cause physical, passionate, or mental injury/stress. Hardly any examples are; work or school, family or relationship troubles, lawful or monetary issues, wellbeing or disease issues, negative self talks or potentially unreasonable assumptions and so on.²

Anxiety in dental patients is characterized as the sensation of strain related with dental treatment and isn't really associated with outside upgrades".³ 60% of patients report some degree of threat of dental treatment. More youthful patients are ordinarily influenced than more older patients. Facial arthromyalgia, dry mouth, lip biting, bruxism and cancer fear are the dental signs of persistently anxious individuals.⁴

Saliva flow rate According to Russ and Ackerman in 1987 suggested that reduced salivary flow rate in depressive disease might be all the more firmly identified with the diet disturbance generally connected with depression. A psychosomatic issue is the one that includes both the body and mind as they are one and impact each other. Illnesses cooperate among body and mind and mind and body.⁵ Mouth is straightforwardly or emblematically identified with significant human impulses and passion. Oral diseases with psychosomatic etiology have for some time been known in medicine. Mental or emotional elements may go about as hazard factors that could impact the inception and progression of oromucosal infections.⁶

MATERIAL and METHODS:

The current clinic based observational Study was conducted over the time of a year. Patients were analyzed for Anxiety or Depression by utilizing Hamilton Anxiety and Depression scale. Equivalent numbers of control were remembered for the investigation. Healthy people coming to the dental OPD area were taken as control. Ethical clearance was obtained from the ethical committee.

The clinical assessment of the oral cavity was completed after the WHO rules, under light on a dental seat, utilizing a mouth mirror to check for OLP, RAS and BMS. Inclusion criteria includes of the subjects diagnosed with anxiety or depression within the age of 20-65 years. Exclusion criteria consists of people utilizing tobacco; Presence of sharp cusp, overhanging restoration smokers palate and any other systemic condition etc and subjects under treatment with psychoactive medications [antidepressants, narcotics].

The clinical finding of the OLP was set up by the presence of a respectively balanced lacelike greyish white, radiating reticular, annular, plaque-type sores present at the hour of the assessment. Clinically analyzed OLP were exposed to histopathological assessment for affirmation. The conclusion of RAS depended on the patient's set of experiences and clinical discoveries. Patients having round or ovoid ulcers with erythematous halo and every episode of

ulceration going on for a couple of days to weeks were considered for the examination. The ulcers must be there at the hour of the clinical assessment. BMS was perceived when oral burning or painful manifestations, without distinguishable mucosal changes were available at the hour of clinical assessment.

RESULTS:

A sum of 225 patients (age 20 -65 years) having stress or depression were incorporated in study with equal number of controls. Old age was related with lower level of stress and anxiety. Lichen planus is a relatively common oral lesion that affects the oral mucosa.

When both the genders were compared, lichen planus more commonly affected females (20), than males (7). The difference was found to be statistically significant. When both genders were compared for MPDS, it was found that males were more predominantly affected than females.

Xerostomia was found to increment with age.

In 225 anxiety and depression patients, 50 [22.2%] had oral diseases. Out of 225 individuals in control group, 13 [5.7%] had oral diseases. There was significant increase in oral diseases in anxiety patients and depression than control group. Comparison of oral diseases in two groups by using chi square revealed highly statistically significant results between anxiety, depression patients and control group. Comparatively oral lesions are higher in anxiety patients than compared to depression patients and control group patients.

Table 1: Demographic details of participants in study and control group

Characteristics	Study Group (n=225)	Control group (n=225)
Gender		
Male	121	116
Female	104	109
Age		
20-30	42	46
31-40	69	59
41-50	47	57
50-60	33	39
>60	34	24

Table 2: Prevalence of oral diseases in study and control group

Oral disease	Study group	Control group
Lichen planus	27(12%)	7(3.1%)
Recurrent aphthous stomatitis	15(6.7%)	4(1.7%)
Burning mouth syndrome	5(2.2%)	2(0.8%)
MPDS	2(0.8%)	0
Xerostomia	1(0.4%)	0

In study group with patient having anxiety and depression, the prevalence of lichen planus was 12%, RAS was 6.7%, and BMS was 2.2%. In control, the prevalence of Lichen planus was 3.1%, RAS was 1.7% and BMS was 0.8%.

DISCUSSION:

Stress has become a vital piece of our lives nowadays. It is an unavoidable interaction. Different oral illnesses identified with stress should be maintained. Above all else is to accomplish to a right etiological factor of the disease and afterward is the stress management therapy alongside the symptomatic alleviation.⁷ Stress Relief Strategies: These are Body Relaxation Exercises (breathing methods/guided symbolism); Physical Exercise (yoga/routine work out); Meditation; Counseling (talk treatment/life instructing) and Social Support. Other recommended strategies to keep away from stress are acceptable sustenance/changing discernments and assumptions, break occupations/assignments into sensible parts. They must be referred to psychological counseling and antianxiety management.⁸

The current examination researched the psychoemotional condition of a populace which permitted the observation of increased exposure to stress and increased measured values of anxiety.

Lichen planus is a moderately normal dermatoses that additionally influences the oral mucosa. The depiction of papules, striations, and plaques was given by Unna in 1882.⁸ The main oral lesions were seen by Audry in 1894.⁹ The etiology of LP includes a cell-mediated immunological reaction, which prompts the degeneration of the basal epidermal cells.¹⁰ It comprises of marginally raised thin whitish lines as a ring or ring-like lesion.¹¹ The most successive conditions which may prompt lichen planus are depression, tension, and stress.

When both the genders were compared, lichen planus more commonly affected females (17), than males (10).

In the current examination, the prevalence of lichen planus was 12% in anxiety and depression patients, and 3.1% in control group and the predominance of RAS was 6.7% in anxiety and depression patients, and 1.7% in control group proposing a lower prevalence rate than that detailed in the past investigations by Mathew et al. in Indian typical populace [2.01%], (8), Chattopadhyay in United States.¹² In a cross-sectional investigation by Mumcu G in Turkey populace, RAS were seen in 1.2% of the analyzed patients.¹³ This is predictable with the after effects of the current investigation.

Numerous investigations have assessed the rate in all inclusive community. The distinction in prevalence rates could be credited to various segment factors, hereditary variables and contrast between the racial gatherings. Numerous scientists assessed the stress, anxiety and depression in patients experiencing oral illnesses. They reasoned that altogether higher stress, anxiety and depression levels were found in the RAS, BMS and OLP patients when contrasted with controls.^{13,14,15}

The prevalence rate of BMS saw in the current investigation was higher (2.2%) than revealed by Lipton JA, Ship 0.7%.¹⁶

Bergdahl and Anneroth 0.8%,¹⁷ in any case, lower than that detailed by Basker Hakeberg M, 4.6%.¹⁸ Bergdahl M, Bergdahl J, 3.7%¹⁹. Femiano F, 13% , Savage NW and Scala A.^{20,21,22}

Results from various investigations show that young generation more regularly experience oral indications and than the remainder of society, because of more stressful condition of life and the age of this population, and individuals aged somewhere in the range of 20 and 40 years are underscored to be more vulnerable to developing temporomandibular dysfunction TMD.

Many studies have expected impact on the body; it causes obsessive changes or emotional manifestations in typical oral mucosa. A few investigations have endeavored to clarify the conceivable job of mental state, emotional instability and personality modulation in precipitation of different oral sicknesses like RAS, OLP and BMS, however no examinations are accessible on

the predominance of oral illnesses in mental conditions like Anxiety and Depression.²³ It is suggested that mental disturbances multiply the turn of events and deteriorating of the oral sicknesses. Numerous scientists tracked down that oral illnesses frequently undergo periods of abatements and intensifications that regularly unmistakably identify with the patients emotional status.²⁴ Since the oral tissues are exceptionally responsive to mental impacts, oral indications are regular psychosomatic appearance.

CONCLUSION:

Inside the extent of the current investigation, it was presumed that, though the etiology of most oral injuries isn't known, the role of stress and other psychogenic variables can't be precluded. The results of our study have demonstrated stress to be one of the major contributory elements in the development and progression of oral diseases. 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 psychosomatic management should be taken into consideration when considering patients with these oral diseases.

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