

Prevalence of bruxism and oral lesions in psychiatric patients – A survey

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ABSTRACT

As oral cavity is an integral part of general health, persistent and unrelenting stress often becomes a danger affecting the oral health and overall health causing various psychosomatic disorders. Present study aimed to determine the prevalence of oral mucosal lesions and bruxism in psychiatric patients dependent on psychotropic drugs. Dental examination was done and questionnaire administered to 150 psychiatric patients and 150 control participants. In dental examination recurrent aphthous stomatitis, burning mouth syndrome, oral lichen planus, bruxism, temporomandibular disorders were evaluated. Results showed that psychiatric patients had higher prevalence of bruxism, oral mucosal lesions in general, than the control group.

Key Words: Aphthous stomatitis, burning mouth syndrome, oral lichen planus, bruxism

Introduction

Modernization has made the people of world weak and unhealthy both physically and mentally. Psychological stress adversely affects the physiological functioning of a person to a great point of distress. This has

caused a rapid increase in psychiatric disorders in the population over the years. Such psychiatric patients are being routinely treated with various Psychotropic drugs. Great emphasis is put these days in oral health promotion and oral disease

prevention amongst the general population, but still dental health is being neglected amongst the medically compromised patients especially those dependent on drugs.

The number of patients suffering from psychiatric problems is on an alarming rise in India. The National Institute of Mental Health and Neurosciences (NIMHANS) in Bangalore estimates that 20 million Indians need help for serious mental disorders, while a further 50 million suffer from mental illness not considered very serious.^[1]

The present study was conducted with the aim to assess and compare the prevalence of oral lesions which includes recurrent aphthous stomatitis (RAS), Oral lichen planus (OLP), Burning mouth syndrome (BMS), Bruxism and TMD in psychiatric patients dependent on psychotropic drugs and healthy population (control group).

Material and methods

A total of 450 subjects between the age group of 20-60 years were selected for the study. They were divided into three groups, Group A: 150 Institutionalised psychiatric patients, Group B: 150 Non-Institutionalised psychiatric patients and Group C: 150 healthy subjects (control group). Inclusion Criteria consisted of psychiatric patients taking prescribed psychotropic drugs since at least 6 months and having the ability to read and write so that they can answer the questionnaire. Patients diagnosed with systemic diseases like cardiovascular, respiratory, metabolic, endocrinal disorders, patients who have a history of head or neck injury, radiotherapy, chemotherapy were excluded from the study.

A thorough clinical examination of the patient was performed and a questionnaire was filled which included information on age, sex, duration of illness, education, type of psychiatric disorder and drugs used. All the oral disorders were diagnosed by an oral medicine specialist following proper diagnostic criterion. Statistical analysis was carried out using chi-square test to evaluate the significance of the difference in distribution of the parameters among the groups.

Results

The study group A had 50% males whereas group B and C had 46.66% and 56.66% males, respectively. Socio-demographic and medical characteristics of all subjects are shown in Table 1. Most common psychotic disorder was schizophrenia in group A (n=58, 38.66%) and major depression disorder in group B (n=60, 40%). Most frequently used drug in both group A and B was atypical antipsychotic drug (n=300, 31.33%).

Recurrent aphthous stomatitis (RAS) was most prevalent amongst the group A (23.3%) as compared to group B (20.6%) and control group (20%). The prevalence of Oral Lichen Planus (OLP) and burning mouth syndrome (BMS) was highest in group B (8.66%) and group A (23.55%) respectively. (Table2, Graph 2) These findings were statistically significant with p value < 0.001. No significant relation was observed between duration of psychiatric treatment and prevalence of three oral mucosal lesions. Also, prevalence of oral diseases did not differ significantly amongst the various psychiatric disorders.

Physiological tooth attrition is found in significant percentage in general population as well (grade 0, 1) and was found in all three groups. However,

Table 1: Socio-demographic and clinical characteristics of all psychiatric patients

	GROUP A (%)	GROUP B (%)	GROUP C (%)
Age (Mean)	35.4	33.92	31.8
Gender Male :	75 (50%)	70 (46.6%)	87 (58%)
Female:	75 (50%)	80 (53.3%)	63 (42%)
Duration of illness			
<1 year	47 (31.33%)	56 (37.33%)	-
1-3 years	55 (36.66%)	57 (38%)	-
3-6 years	38 (25.30%)	30 (20%)	-
>6 years	10 (6.66%)	7 (4.66%)	-
Psychiatric disorder			
Major depression	28 (18.66%)	60 (40%)	-
Schizophrenia	58 (38.66%)	33 (22%)	-
Mood disorders	9 (6%)	18 (12%)	-
Anxiety disorder	8 (12%)	35 (23.33%)	-
Medication			
Antipsychotics	52 (34.66%)	42 (28%)	-
Lithium -	30 (20%)	22 (14.66%)	-
Valproic acid	23 (15.33%)	18 (12%)	-
SSRI	23 (15.33)	32 (21.33%)	-
TCA	4 (2.66%)	3 (2%)	-
SNRI	18 (12%)	33 (22%)	-



Table 2: Prevalence of RAS, BMS, OPL, Bruxism and TMD in institutionalized, non-institutionalized patients and control group (n = 450)

	Group A	Group B	Group C
RAS	35(23.3%)	31 (20.6%)	30 (20%)
BMS	38 (25.33%)	30 (20%)	21 (14%)
OLP	6 (4%)	13 (8.66%)	4 (2.66%)
Dental Attrition	40%	37%	20%
Signs of TMD	36%	29%	10%

abnormal attrition (grade 2, 3) was recorded 40% in group A, 37% in group B and only 20% in group C. Similarly, signs and symptoms of joint sensitivity were notably high in group A (36%) and group B (29%) but very low in control group (10%) (Table2, Fig2).

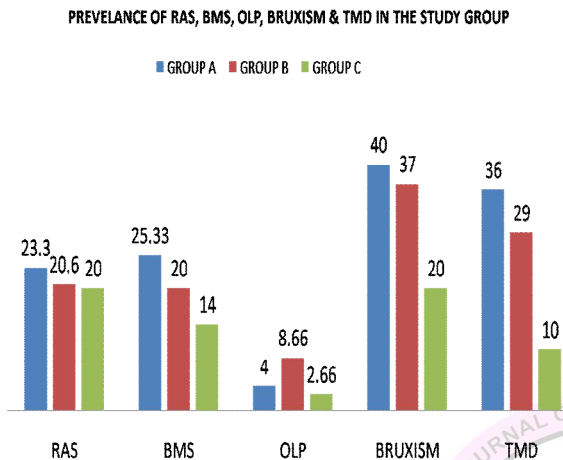


Fig1: Graph showing prevalence of RAS, BMS, OLP, BRUXISM & TMD in institutionalized, non-institutionalized patients and control group (n = 450)

These findings were also statistically significant with p value < 0.001.

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