

Oral Lesions in Psychiatric Disorder Patients

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ABSTRACT

Dental anxiety appears to be linked to other psychological diseases and symptoms, according to a growing body of studies. The goal of the study was to see how dental lesions are linked to other mental illnesses and to assess and to see how common concurrent symptoms are in people with psychiatric disorders. The audit was carried out and the results were submitted in compliance with the MOOSE statement. Data sources included PubMed, PsynInfo, Web of Science and, Thed Scopus. The findings support the notion that dental problems and psychiatric disorders are linked. There should be strong correlation with dental lesion associated with psychiatric disorder such that those with poor physical health causes poor oral hygiene and having greater risk of severe diseases. In that review article, betal nut chewing habit is also related with neurological problem and causes many adverse effects. Several studies have revealed a strong effect. Although the people without attention towards their overall health with psychiatric disorder have received increasing attention, there has been less focus on dental health, despite the fact that it is a main component of overall health. The two-way relationship between dental and mental health is discussed in this article. The possibility of dental treatment can cause anxiety and phobia in one direction.

Dental disease is linked to a variety of psychiatric diseases, including severe mental illness, affective disorders, and eating disorders. Dental anxiety patients are more likely to acquire phobia, despair, mood swings, and other psychiatric diseases and symptoms. Many cases with positive relationship between incidences of oral disease associated with psychiatric disorder. A thorough review of studies looked at the relationship between dental lesions and psychiatric problems.

Key words: Psychiatric disorder, Mental illness, Dental lesions, Systemic diseases

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INTRODUCTION

A professionally recognised pattern of mental symptoms or behaviour that causes severe or continuing sickness, personal discomfort, or others is known as psychiatric illnesses [1]. Poor oral hygiene and psycho pharmaceutical side effects are the most common causes of oral lesions in the mentally ill. Healthy oral cavity is a crucial area of overall health since it affects every aspect of life [2,3]. Due to absence of knowledge, the effort of performing oral hygienic techniques, the obstacles that must be corrected to treat them dentally and the adverse effect occur by anti-depressants which affect the mucosa causing higher risk of developing bucco-lingual diseases. which are linked, as research has shown over the previous two decades. The schedule for these individuals will differ depending on aspects like the patient's communication skills, medical history, age, dental treatment priority, prognosis, and

future maintenance, fear is recognised to be linked to depression and mental disorders, as well as alcoholism and substance abuse. With a variety of psychiatric problems, there is higher level dental lesions, the more comorbid phobias and disorders are present. Oral cavity is a crucial component of overall wellness. Systemic disorders have been linked to poor dental health for example cardiovascular disorders, stroke, and lung illness eating habits are influenced by oral health [4]. Speech, as well as other aspects of social and psychological existence [1,5]. For a long time, those suffering from various psychiatric disorders are vulnerable to oral disease. There is variety of causes for this, including a lack of drive, poor oral hygiene, and others. The two most prevalent diseases are tooth demineralisation and periodontium pathology is two main problems that have an impact on oral health. Tooth decay is caused by the loss of minerals in the mouth [6-9].

Oral health and mental wellness have a close. On the one hand, almost half of all dental patients are anxious about their appointments, which can contribute to poor dental hygiene. Depression or anxiety can heighten the perception of dental pain, regardless of the severity of the oral condition relationship. Burning mouth syndrome, for

example, dizziness, headache, weakness that is frequently problem connected with depression or anxiety mental phobia, a type of specific phobia in patients with clinically healthy oral mucosa. Those people suffering from severe neurological problem having greater risk of psychiatric disorder and hence they cannot maintain proper oral hygiene, and hence they have more chances of oral lesions because of improper diet, and consumption of more sweets, concurrent abnormal habits such a tobacco, alcohol, or other addicted products which causes financial problem and hence does not maintain oral hygiene. Dry mouth (xerostomia) is a primary cause of oral health problems, which is sometimes exacerbated by opportunistic gingivitis caused by dietary inadequacies caused by psychosis or anorexia nervosa. Patients with bulimia have been reported to have salivary secretion due to parotid gland disease [5-14]. Xerostomia is a typical adverse effect of psychiatric medications; especially those that contain anticholinergic [15-18] non pathological disorders, tooth demineralization and tooth surrounding tissue destruction are the most frequently affected part that impairs oral health [19-24]. The poor physical health of those suffering from severe mental illness has recently received a lot of attention, particularly in relation to diabetes, cardiovascular disease, and cancer [25]. Patients with a dry mouth may also have dry lips and throat, as well as discomfort or burning in the mouth, changed taste perceptions, and halitosis. Chewing, swallowing, and speaking may be challenging for them. Candida infection is more likely. Chronic Obstructive Pulmonary Disease (COPD) and oral carcinoma are two of the most common. Mentally retarded patients frequently exhibit oral symptoms such as severe palatal erosion, facial pain, and self-inflicted harm. Enamel degradation is common in people suffering from anorexia and bulimia. A patients in a clinic for temporomandibular joint dysfunction displayed signs of mental illness. Patients who visit a specialist pain clinic have a high risk of psychological illnesses. Anxiety and despair are aetiological factors in burning mouth syndrome [26-28].

LITERATURE REVIEW

Dental erosion

Dental erosion, also known as pathological wear on tooth surfaces that causes diminishing of tooth structure and occurs without the presence of microorganisms. Significant use of citrus fruits, soft drinks, and sports drinks, as well as stomach reflux or frequent vomiting, is all risk factors for the latter.

Physiological wearing of tooth due to heavy masticatory forces and heavy occlusion and tooth grinding because of stress, pathological wear of tooth means when teeth start to lose enamel due to some agent such as a mechanical aid like toothpick, and chemical disintegration of the tooth can all cause tooth loss [23].

Dental caries

Primary actions on tooth occur because of bacteria which causes tooth demineralization [22]. Enamel and dentin demineralization, and bacterial accumulation which causes tooth decay occur on particular area of crown and roots of the teeth, due to action of the bacteria which produces organic acid from the plaque causes tooth decay. The index which determined severity of the carried called as Decayed, Missing, and Filled Teeth or surfaces (DMFT or DMFS) [17-19]. Tooth demineralization, often known as Dental caries, is one of the most common chronic diseases afflicting people all over the world, and it can strike anyone at any age. The disease affects both the crowns and roots of teeth. Dental caries is caused by a complicated interaction between acid producing bacteria, fermentable carbohydrates, and a range of host factors like teeth and saliva and it can begin as aggressive tooth decay in new-borns and toddlers' mainly teeth as early as infancy. High levels of cariogenic bacteria, insufficient salivary flow, insufficient fluoride exposure, poor mouth cleanliness, incorrect baby feeding practises, and poverty are all physical, biological, environmental, behavioural, and lifestyle variables that enhance the prevalence of caries.

Periodontal diseases

Gingivitis, which only arises when tooth plaque is present, is the first sign of periodontal disease. Periodontitis is defined by bleeding gums and pockets formed when the gums split from the teeth. Infection subsequently affects the surrounding ligaments and connective tissue, causing damage to the surrounding (alveolar) bone. In later stages of diseases, there is a periodontal disease characterise by the exposing of tooth roots and the breakdown of the periodontal ligament. At this time, the condition is irreversible (periodontitis). These symptoms and indicators are frequently linked to halitosis is a condition in which a person's breath smell (bad breath) on managing the caries process for individual patients over time, using a least intrusive, tissue-preserving approach [20].

Salivary secretion in psychiatric disorder patients

Dry mouth should not be dismissed as a minor issue in the community, as it is a complex phenomenon affecting oral function and overall quality of life. Xerostomia is a condition in which the mouth feels dry. Xerostomia affects 5.5% to 46% of the population, with older persons being the most affected. Women are also more likely than men to suffer from xerostomia. It can be caused by insufficient salivary production as a result of aberrant salivary gland function, which is referred to as "real" xerostomia; however, most people with xerostomia do not show external indications of hyposalivation. Dryness of the oral cavity, despite normal salivary gland activity, is referred to as "symptomatic" xerostomia or "pseudo" xerostomia. Despite proper oral hygiene, patients with dry mouth may experience difficulties in normal physiological activity such as deglutition, mastication, or speech, as well as burning mouth, bad smell, dysgeusia,

dry buccal mucosa, glossitis, cracked and peeled lips, oral candidiasis, and dental caries [1,21]. Despite proper oral hygiene, patients with xerostomia may experience difficulties swallowing, chewing, and/or speaking, as well as burning mouth, halitosis, dysgeusia, dry buccal mucosa, glossitis, cracked and peeled lips, bacterial and fungal infection, and tooth demineralisation. As a result, a person's quality of life can be harmed by xerostomia.

Schizophrenia related with betal nut chewing habit

The properties of betal nut are mostly on the central and peripheral neurology. Euphoria, a feeling of well-being, warmth, and heightened attentiveness are all symptoms of euphoria. Areca nut intake is connected to an addiction syndrome that includes increased alertness, relaxation, euphoria, and postprandial satisfaction, as well as a withdrawal syndrome that includes inability to sleep, altered mood, irritability, and hyperactive, and is similar in severity to amphetamine usage. Regular users have reported salivation, palpitation, hemicrania, and increased capacity to function [22]. Within minutes of ingesting one betal nut, you will experience tremors, hypertension, raised temperature, reddening, and sweating [24]. The effect of areca nut on neurological symptoms leads to Euphoria, heighteners alertness, neurotoxicity, etc.

Advanced psychiatric disorders

Bacterial infection causes increased decay and gum disease in affected person with advanced diseases like dementia and schizophrenia. Antipsychotics, antidepressants, and mood stabilisers are all examples of psychotropic pharmaceutical adverse effects [1,19]. There are various factors which causes improper oral hygiene in psychiatric disorder patients such as adverse habits like tobacco consumption, alcohol and less nutritious diet which leads to dental lesions. Other than erosion, attrition, or abrasion.

Attrition is widespread in depression, owing to concomitant disorders such as smoking, drinking, and bruxism. Through gastro-oesophageal reflux, high levels of cigarette and alcohol usage can induce erosion. Caries can occur in depressed patients mainly due to improper oral hygiene and also due to drugs such as antidepressants. Dry mouth is a side effect of antidepressant medications (amitriptyline, nortriptyline). Antihistamines, anticholinergic, antihypertensive, and antipsychotics are some of the other medications linked to dry mouth. Tricyclic antidepressants, in comparison to selective serotonin reuptake inhibitors, are linked to a higher incidence of dry mouth (SSRIs). Patients suffering from halitosis and dry mouth.

DISCUSSION

The most common diseases that affect oral health are dental erosion, caries (tooth decay), and periodontal (gum) diseases.

Dental erosion: Dental erosion or pathological wear on tooth surfaces is defined as loss of dental tissue without the involvement of bacteria. Risk factors for the latter include the consumption of large amounts of citrus fruit, soft drinks, and sports drinks as well as the presence of gastric reflux or frequent vomiting.

Tooth decay: Dental caries is the result of bacterial action [22]. Organic acids produced by microorganisms in dental plaque cause demineralisation of enamel and dentin with cavitation of specific sites on the tooth surface. Caries is assessed by the number of Decayed, Missing, And Filled Teeth or Surfaces (DMFT or DMFS) [17-19]. Dental caries, also known as tooth decay, is one of the most common chronic diseases afflicting people all over the world; people are susceptible to it throughout their lives. Dental caries develops over time as a result of a complex interaction between acid-producing bacteria, fermentable carbohydrates, and a variety of host factors such as teeth and saliva. The disease develops in both the crowns and roots of teeth, and it can arise in early childhood as an aggressive tooth decay that affects the primary teeth of infants and toddlers. Physical, biological, environmental, behavioural, and lifestyle factors that increase the risk of caries include high numbers of cariogenic bacteria, insufficient salivary flow, insufficient fluoride exposure, poor oral hygiene, inappropriate infant feeding methods, and poverty. Primary prevention should be based on the identification of common risk.

CONCLUSION

A high degree of dental disorders is linked to a high level of other phobias, depression, mood disorders, and other psychiatric disorders and symptoms. However, based on the articles evaluated, it is impossible to say if patients who have psychiatric disorders are more likely to have dental lesions. This poses a problem in clinical practice; how should a dentist handle a situation like this?

Should a patient with dental anxiety see a psychologist or psychiatrist, or should they be referred to one? Further it is necessary to conduct tests. Habit of areca nut consumption is associated with various psychiatric disorders because it causes various systemic adverse effects on neurological systems.

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