Psychosomatic Disorders Pertaining To Dental Practice

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Abstract

Psychosomatic symptoms are by definition clinical symptoms with no underlying organic pathology. Psychosomatic disorders represent impaired adaptation or deficiencies that limit the capacity to adapt successfully to the demands of everyday life. The symptoms are thought to be a response to stress. Appropriate health consultation should be considered for further evaluation and treatment.

Keywords

Dental practice; psychosomatic disorders; Psychopharmacology; Revised classification.

Introduction

Psychosomatic disorders are defined as disorders characterized by physiological changes that originate partially from emotional factors. Psychological disorders can affect the oral cavity, since oral environment is related directly or symbolically to major human instincts and passions and is changed with a high psychological potential. [1]

Psychological disorders may be due to several biochemical disorders involving neurotransmitters in the brain, incomplete connections with an oral region and undefined complaints due to cognitive processes to the higher centres of the brain. [2]

Psychosomatic disorder is a disease which involves both mind and body. Body and mind are one and influence each other. There are no diseases that are purely mental or purely somatic, but a living process in a living organism and its vital activity combines mental and somatic aspects of a disease. Hence diseases interact between body and mind, mind and body. [3]

Psychosocial stress affects the nervous, endocrine, and immunological systems, which are involved in the onset and exacerbation of various diseases. Higher levels of inflammatory cytokines (such as interleukin-6, IL-6) and acute phase proteins (such as C reactive proteins (CRP) are found in the peripheral blood and cerebrospinal fluid of patients with major depression. [4]

The autonomic nervous system supplies the endocrine glands that produce insulin, cortisone, insulin, adrenaline and thyroxin hormones. Since these glands are also controlled by the hypothalamus, emotional changes indirectly influence and affect the hormones. Since there is a close connection between the mind and the body, people often react physically to an emotionally stressful even.[5,6] Psychosomatic disorders are characterized by multiple physical symptoms. They are not intentionally produced or feigned and they are believed to be associated to psychological factors.

Classification

Psychosomatic disorders pertaining to dental practice can be categorized in to following groups,

(A) Pain related disorders. 
(B) Disorders related to altered oral sensation. 
(C) Disorders induced by neurotic habits. 
(D) Autoimmune disorders. 
(E) Disorders caused by altered perception of dentofacial form and function. 
(F) Miscellaneous disorders. 

(A) Pain related disorders:

These include disorders of the orofacial region presenting with vague pain attributed to psychological stress. This
category includes,
(i) Myofascial pain dysfunction syndrome– It’s clinical presentation includes masticatory muscle spasm and temporomandibular joint pain.
(ii) Atypical facial pain – It is characterized by persistent idiopathic facial pain, which lacks clear diagnostic criteria.
(iii) Phantom pain - It involves sensation of a part of body that has been removed. It is usually associated with tooth extraction. It can be graded in to phantom tooth pain, phantom bite syndrome, intraoral stump pain.

**Disorders related to altered oral sensation:**
This category includes following subcategories:
(i) Burning mouth syndrome- It is a disorder presenting with burning sensation of oral mucosa for which no medical or dental cause can be found.
(ii) Idiopathic Xerostomia- It presents with dryness of oral mucosa and it is associated with quantitative and qualitative changes in saliva.
(iii) Idiopathic dysgeusia – It represents as persistent abnormal taste sensation.
(iv) Glossodynia – Patient experiences painful tongue.
(v) Glossyphrosis – It is burning sensation of tongue.

**Disorders induced by neurotic habits:**
These disorders can be subdivided in to following disorders,
(i) Dental and periodontal diseases caused by bruxism– It includes abrasions, hypersensitivity, periodontal distraction and temporomandibular dysfunction.
(ii) Biting of oral mucosa – Self mutilation due to biting of oral mucosa.

**Autoimmune disorders:**
This category includes common dermatological disorders with oral manifestations and includes followings,
(i) Oral lichen planus – It presents with burning sensation in oral mucosa with interlacing keratoticlines.
(ii) Recurrent aphthous stomatitis- It presents with ulcers on oral mucosa.
(iii) Psoriasis - Psoriasis may be associated with fissured tongue, geographic tongue, temporomandibular joint pain and ulcers on oral mucosa.
(iv) Mucus membrane pemphigoid – It is associated with blisters on oral mucosa.
(v) Erythema multiforme – It can present with ulcers on oral mucosa.

**Disorders caused by altered perceptionentofacial form and function:**
(i) Body dynamic disorder – It is phantom dysmorphia. The patient seeks treatment for an impaired defect in appearances.

**Miscellaneous disorders:**
(i) Recurrent herpes labialis – Patient complains of blisters on oral mucosa.
(ii) Necrotising ulcerative gingivostomatitis – It is characterized by gingival necrosis, ulceration, pain and bleeding.
(iii) Chronic periodontal diseases–It is characterized by tooth mobility, loss of attachments and bone loss.
(iv) Cancerophobia- Persistent fear in a person that he/she has contracted oral cancer is called cancerophobia.
(v) Delusional halitosis – It is characterized by false offensive mouth odour.

*Oral dyesthesias rating scale*
In dentistry, Oral Dyesthesias Rating Scale is a reliable tool to quantity evaluate symptoms of oral dyesthesias and the consequent functional impairments. Patient complaints included unusual and uncomfortable sensations in the mouth such as over-secretion of mucus, tingling, burning, pain, pulling on the teeth, moving teeth, foreign bodies, and unusual tastes without a somatic base. It is designed to cover various symptoms presented by patients by classifying them into main categories. In addition to being applied for clinical evaluation and follow-up, this tool can be utilized for clinical research on topics such as elucidating the association between severity of each symptom and findings of imaging studies. [7]

**Assessment**
a. Basic grouping of the psychosocial factors related to psychosomatic disorders:
Psychosocial factors involved in psychosomatic disorders can be classified into three categories: Preparation, inciting, and continuing factors.

b. Preparation factors:
Preparation factors do not directly cause the disease, but they produce preclinical conditions in which the disease occurs when inciting factors are added. They include problems of life history, family relationships, character, and behavioural styles.

c. Inciting factors:
Inciting factors are acquired ones that manifest the disease in combination with one or more of the above prepared factors. Intense emotional stressors that cause fear, anger, or sadness are examples of inciting factors.

d. Continuing and precipitating factors:
Continuing factors or precipitating factors are also acquired ones that prolong or worsen the course of the disease. Psychosocial factors can be continuing and precipitating factors include problems of emotion, character, behaviour, and daily life caused by the disease.

**Management: goals and interventions**
1. Achievement of a therapeutic relationship with mutual trust and motivation to treatment.
2. Understanding the mind-body correlation and making appropriate adjustments.
Psychological interventions in patients suffering from psychosomatic disorders should be performed by different health professionals and range from reassurance and effective communications to specific psychotherapeutic and psychopharmacological treatments.
Cognitive behavioural therapy (CBT) is regarded as the
psychotherapeutic treatment with the highest level of evidence. Psychodynamic therapy (PDT) is recommended for cases in which CBT is not effective or not available. Psychopharmacological treatment includes selective serotonin reuptake inhibitors and serotonin-noradrenaline reuptake inhibitors.\[^9\] Deanxit (flupentixol 0.5mg + melitracen 10mg) with sertraline is useful in clinical practice. Studies have showed that several antidepressants are beneficial in psychosomatic disorders, but whether their effect is mediated through reduced depression and anxiety or a specific effect on somatic symptoms needs further evaluation.\[^10,11\] Add-on treatment with gabapentin, pregabalin, nabilone, TNF-α inhibitor therapy or topiramate for treatment-resistant psychosomatic disorder is in a naive stage.\[^12\]

**Choice of Antidepressant Drug:**

- Match choice of antidepressant drug to individual patient requirements as far as possible, taking into account likely short-term and long-term effects.
- In the absence of special factors, choose antidepressants that are better tolerated and safer in overdose. There is most evidence for selective serotonin reuptake inhibitors (SSRIs) which, together with other newer antidepressants, are first line choices.\[^13\]
- Older tricyclic antidepressants (TCAs) should generally be reserved for situations when first-line drug treatment has failed. Older monoamine oxidase inhibitors (MAOIs) should generally be reserved for patients where first-line antidepressant therapy has not been effective and should only be initiated by practitioners with expertise in treating mood disorders.
- In more severely ill patients, and in other situations where maximising efficacy is of overriding importance, consider clomipramine, venlafaxine (≥ 150 mg), escitalopram (20 mg), sertraline, amitriptyline, or mirtazapine in preference to other antidepressants.

**Conclusion**

Assessment of psychosocial factors and psychosomatic treatment that follow the various Guidelines for the Diagnosis and Treatment of Psychosomatic Diseases is useful in the usual medical setting, although there is relatively limited empirical evidence at the present time. It is necessary to revise the guidelines for the psychosomatic treatment of patients with psychosomatic disorders by accumulating high-quality evidence.

**What this study adds:**

1. **What is known about this subject?**
   A simple working type classification has already been proposed for the psychosomatic disorders of the oral cavity.
2. **What new information is offered in this review?**
   This article aims to review the psychosomatic disorders pertaining to dental practice with a revised working type classification.

**CONFLICTS OF INTEREST** None declared

**FUNDING** None