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Review Article

Psychosomatic disorders and their importance in dentistry

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ABSTRACT

Psychosomatic disorders are disturbances of visceral function, secondary to chronic attitude and long continued reaction to stress. Psychosomatic dentistry helps to acknowledge the relationship between the psychic and normal physiological functions, thereby allowing diagnosis of these disorders to correctly treat the individual suffering from it.

This paper deals with a wide spectrum of psychosomatic disorders which may affect oro-facial region, where, unfortunately they remain unrecognized because of common and limiting nature of their presenting features. Therefore, these disorders allow patients to occupy a sick role while psychologically unwell, to avoid responsibility for life by occupying position of suffering victim.

1. Introduction

A wide spectrum of psychosomatic disorders may affect oro-facial region, where, regrettably, they go unnoticed because of the simple & limiting nature of their presenting clinical features.

Psychosomatic disorders are disturbances of visceral function, secondary to chronic attitude & long continued reaction to stress. These disorders may impact any body part innervated by autonomic nervous system, since over-activity or under-activity of that organ-system, caused by stress or emotional disturbances, triggers the disorder.

Any emotional illness in a patient may manifest as:

1. Neurosis
2. Psychosis

Neurosis is a type of psychosomatic disorder which occurs due to unsettled emotional disturbances and consists of anxiety states, compulsion, depressive neurosis, obsessional states and phobic states.

Psychosis is a manifestation of organic or emotional origin which occurs usually due to derangement of personality & loss of contact with what is occurring in reality. Patient suffers from delusions. Consists of:

Affective psychosis is characterized by morbid changes of mood, either depression or excitement. Endocrine disturbances are common precipitating factors.

Schizophrenia is basically disorganization of personality and affects patient's thinking, feeling & perceiving.

Behavoriol factors for psychological illnesses – Psychological illness may be contributed basically by three factors:

1. **Personality** – is basically the qualities possessed by an individual which shape his or her way of conducting

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and perceiving different situations. Two major ways to study personality, the nomothetic and the idiographic were detailed by pioneering American psychologist, Gordon Allport (1937). Nomothetic psychology lays importance in the establishment of general laws by involving studies concerning large group of people. Idiographic psychology is a study which lays emphasis on personal experiences of different and unique human nature. Personality disorders are anomalies of behavior and include:

(a) Affective personality in which mood is of gloom or marked optimism.
(b) Anankastic personality, which is an obsessive-compulsive type of personality, characterized by excess caution & conscientiousness.
(c) Antisocial personality which is manifested by a lack of sympathy or overt aggressiveness.
(d) Asthenic personality in which individuals are passive & dependent.
(e) Explosive personality which is characterized by sudden outbursts of irritability or anger triggered off by trivial irritation.
(f) Hysterical personality in which individual displays shallow labile emotional reactions & dependency on others.
(g) Paranoid personality in which an individual varies from being excessively sensitive to aggressive and complains of mismanagement & suffering.
(h) Schizoid personality in which patient displays marked reserve, & poor social adjustment.

2. **Psychiatric disturbance** – is characterized by 'emotionally fit' individual who are under stress. Patient shows transient emotional illness along with persistent hypochondriasis . This represents a personality disorder with manifestations of Frank psychosis. The psychiatric disturbance detected in these patients is often mild and brief and is considered as a Distress syndrome.
3. **Stressful environment** – Research shows that continuous stress has been commonly cited as precipitating cause of psychiatric disorders. Adults usually develop adjustment disorder in response to ongoing problems in marriage, finances, work, or school. In adolescents, common stressors are problems with school, parental rejection, or parents' marital issues.

The diagnostic and statistical manual of mental disorders defines seven distinct mental disorders that are:

1. **Somatization disorder** – This is a psychological condition characterized by numerous physical symptoms that lack a clear medical explanation. The term "somatoform" indicates that these physical symptoms have a purely psychological nature. This diagnosis is assigned to people who persistently complain about different physical problems which have no detectable cause.
2. **Undifferentiated somatoform disorder** – These typically are those disorders which have ongoing physical complaints for a duration greater than six months, with no definite medical reason. Such complaints emerge or intensify during periods of stress.
3. **Conversion disorder** – In this condition there occurs losses in physical functions, which typically resemble symptoms of a physical disorder. However, there is an assumption that these physical expressions are reflective of an underlying psychological conflict. In other words, the observed alterations in physical function are thought to be a way for the individual to express or cope with emotional or psychological issues that may not be immediately apparent.
4. **Pain disorder** – This is a type of somatoform disorder where pain in one or more parts of the body is primarily or solely attributed to psychological factors. The patient's main concern and revolve around this pain, leading to considerable distress and impairment in daily functioning.
5. **Hypochondriasis** – This is chiefly characterized by an intense and unwarranted fear of having a severe illness. Individuals experiencing hypochondriasis may perceive ordinary sensations as indications of a medical ailment. Also, the apprehension of illness may increase in response to stressful situations. Furthermore, they exhibit a strong resistance to reassurance. Providing suitable information, and education only briefly alleviate their belief in having a disease and their anxieties about it.
6. **Body dimorphic disorder** – is characterized by excessive concern with appearance, and imagined flaws.
7. **Somatoform disorder not otherwise specified** – It is employed for individuals who display symptoms which indicate a somatoform disorder but do not meet the precise diagnostic criteria for any particular disorder, or present symptoms not explicitly addressed by any of the recognized disorders in this category.

2. The Psychosomatic Disorders can be of following types

1. **Paranoid states** – Arise when patient develops firmly fixed delusional ideas, with or without hallucinations. It is characterized by Folie a deux which is a psychiatric response where two closely connected individuals, typically within the same familial context, collectively experience identical delusions.

2. **Hallucinations** – are deceptive or altered sensory occurrences that seem like genuine perceptions. These sensory sensations originate from the mind rather than any external stimuli and develop as visual, auditory, tactile, olfactory, or gustatory changes. A patient suffers from such experiences as a result of alterations in the surroundings—whether they be environmental, emotional, or physical which in turn, stem from factors such as stress, medication, profound fatigue, or mental health conditions.
3. **Illusion** – is a false interpretation of a real sensory change. An illusion, in context of perception, represents a misrepresentation of the senses, uncovering the typical way the brain organizes and comprehends sensory input. Even though illusions distort reality, they are typically experienced similarly by a majority of individuals.
4. **Monosymptomatic hypochondracal psychosis (MHP)** – a unique set of health-related beliefs that stand apart from the rest of a person's personality. E.g. A belief that sand or grit is in the saliva.
5. **Atypical psychosomatic dental problems** – There are certain conditions which manifest dental sign and symptoms while there is no positive finding or dental lesion in the mouth. These conditions may be of psychosomatic origin.
6. **Pain** – it is an unpleasant emotional experience arising from injury to the body or mind.

It arises from biochemical disturbance such as release of pain-producing neuron-peptides in blood vessels, muscles and nerves.

Pain can be classified as:

1. Atypical facial pain (AFP)
2. Facial arthromyalgia (FAM)
3. Atypical odontalgia (AO)
4. Intractable pain

Atypical facial pain (Atypical facial neuralgia, Idiopathic facial pain) – As per the guidelines of the International Association for the Study of Pain (IASP), chronic facial pain is described as symptoms that have persisted for a minimum of 6 months. This is a lasting discomfort on the face or in the oral cavity that doesn't align with the diagnostic criteria linked to any specific orofacial pain disorders. Typically, the pain is not well pinpointed and poorly localized, is dull and aching, and doesn't disturb the patient during sleep. Pain may be provoked by trauma/dental treatment**.** Patient faces difficulty in wearing dentures despite bone smoothing procedures. The patient has an obsessive but dependent personality and has inadequate support from parents/spouse.

Facial arthromyalgia (MPDS, Costens syndrome) – Laskin in 1969 described MPDS as a Psychophysiological condition. It is one of the most common causes of facial pain after toothache. FAM may be a combination of a traumatic arthrosis due to bruxism & painful dilated capsular & muscular blood vessels.

Patient may suffer from clicking and uncomfortable jaw movement on chewing, talking & yawning. Pain occurs which radiates to masseteric, temporal, occipital & mastoid areas or down into neck. Bruxism, clenching & grinding of teeth, nail-biting cheek or lip chewing may also be present. Tenderness may be present in lateral pterygoid, temporalis & masseter, beneath condylar head adjacent to lobe of ear and anterior border of Sterno Cliedo Mastoid muscle. There is click on opening of jaw due to anterior displacement of meniscus and if meniscus is not completely reduced on closure, reciprocal click occurs.

Due to BRUXISM there occurs ridging of buccal mucosa & tongue margins. Worn facets are present on teeth. Ramfjord (1961) saw a role for 'neurotic tensions' in the etiology of bruxism[1] (fig. 1).

Persistent trismus – there is limited movement of the jaw due to continuous contraction of the muscles involved in various oral functions. It may be an isolated manifestation of a psychotic disturbance. Prolonged trismus may lead to elevator muscle hypertrophy & a fibrous extra-articular ankylosis of mandible.

Atypical odontalgia – It is also known as Idiopathic Periodontalgia or Phantom tooth pain. This type of pain is characterized by discomfort in apparently normal teeth. Patients usually comprise of females in their mid-40s who complain of persistent pain in one or more premolar or molar teeth.[2] standard tests using cold, heat or electric stimuli does not have any significant impact on the severity of the pain. Additionally, the features of the toothache stays consistent for extended periods of time, distinguishing atypical odontalgia from pain of pulpal origin. Occasionally, the sensation may refer to neighboring teeth, especially after extraction of the affected tooth.

Intractable pain - a condition in which the causative factor can neither be eliminated nor treated, and despite all methods employed to obtain the cure, there is no relief.[3] Includes patients who have symptoms which persist indefinitely or recur sufficiently often. Sternback (1974) describes these refractory cases as 'playing pain games'. In these patients pain is a peripheral symptom of an underlying psychopathological conflict, and therefore, known as *Conversion Symptom.*

Psychotic pain (delusional pain) - Pain has no special qualitative characteristics. In this condition paranoid elements are essential features. Patient gives history of Schizophrenia & previous psychiatric treatment. Putative lesions are present which are self-inflicted.

Oral dyesthesia (Disturbance of oral sensation) **–** includes:

1. The burning tongue (Glossopyrosis, Glossodynia)

2. Burning mouth syndrome
3. Disturbance in taste (Dysgeusia) & salivation
4. The Phantom Bite syndrome

The burning tongue – this condition is most commonly seen in geriatric patients, who are denture wearers with poor dietary intake. There is a burning sensation that gradually increases. This burning sensation is usually relieved on eating or drinking. Tongue appears bright red with scalloped margins. This condition makes denture wearing very painful and difficult(fig. 2).

Burning mouth syndrome (BMS) - is a very frequent finding in patients visiting the department of oral medicine for the consultation regarding their oral health. Also, according to specialists in psychosomatic medicine, the somatoform disorders specifically incorporating conditions with pain contribute mostly in causing BMS.[4] Females over 50 years of age usually suffer from BMS, most of them being denture wearers. This syndrome is one of the main complain of post-menopausal women.[5] The patient usually suffers from bitter or metallic taste or/and a dry mouth. BMS is associated with depression, anxiety or a stressful life-situation.

Disturbance in taste & salivation – patient suffers from 'nasty' taste with halitosis. It may be associated with dry mouth and burning tongue. Patient suffers from illusions of having saliva which tastes like sand, or too much of saliva in mouth or an excess of mucous. It occurs as a result of depression due to stress. Patient gives history of getting up in the morning before his/her usual time, agitation, decreased hunger and hypothetical explanations, such as amalgam restorations, increased acidic feeling in stomach, which may be a problem of Monosymptomatic Hypochondriacal Psychosis.

The Phantom Bite syndrome – Marbach, in 1978 was the first person to identify this condition. Patient suffers from continuous discomfort as teeth do not meet correctly. Without any observable indication of iatrogenically developed malocclusion, the cause lies in either an obsessional or psychotic issue. As the name suggests 'phantom bite syndrome' comprises of a feeling of continuous discomfort, found mainly in corrected dentition where there is no clinically detectable problem. Even after many oral surgical procedures, patient is not satisfied and refers to various dentists for the correction of the bite.[6]

3. Oral Ulceration

Aphthous ulcers – lesions that commonly affect mucous membranes of the mouth or genitals. Recurrent aphthous stomatitis is one of the most commonly occurring condition. The ulcers are recurrent and appear as round or oval sores. They usually effect inside of the lips and cheeks or ventral surface of the tongue. Certain factors trigger the formation of these lesions, mainly stress which can be emotional or work related, lack of sleep and deficiency of various nutrients like vitamin B, iron and folic acid.

Factitious ulceration (stomatitis artefacta) – is characterized by lesions in the oral cavity which are self-inflicted. Mostly it appears as inflammation and ulceration in certain localized area of the gingiva. In many examples it is observed that an individual does this to gain attention of either the doctor or the members of family. And in some instances, a psychological or mental condition is responsible for such a behaviour.[7] Lesions may occur due to cheek chewing on buccal mucosa, or lip biting.

Anorexia nervosa and bulimia nervosa – this condition is present mostly in younger females who suffer from pathologically low weight as they show behavior which leads to continuous weight-loss. In this condition there is pathological avoidance of food and subject has a delusional body image. Patient sees themselves as fat. These women consciously loose weight by avoiding food, vomiting, purging, exercising too much and even ingesting medicines which suppress the appetite.

4. Litigation, Compensation & Post-Traumatic Stress Disorders

Patients who have suffered injury or are dissatisfied with results of dental treatment or surgery may be litigenous. Neurotics or malingerers, exaggerate their pain for clinical gain. Patient suffers from post-traumatic stress, recurrent recollection of events, pain, weakness, disturbances in concentration & sleep, depression, anxiety, irritability & dizziness. Any deformity can also lead to such disorders and thereby, may prove to be very crucial to one's ability to function in society and maintain their self-respect.[8]

In post traumatic stress disorder patient suffers from thoughts and memories from the past followed by intense emotional turmoil. This leads to feelings of distress and a failure to implement newly acquired skills and talents, thereby affecting the future.

5. Management

1. A multidisciplinary approach is required to treat these patients. The importance lie in recognizing the main aetiological factors and then provide the treatment.
2. Identify the features of chronic pain disorders. Even care should be taken to identify different emotional and psychological events or factors that might lead to these conditions.
3. The patient should be made comfortable and it should be made to realize that the pain is 'REAL'. They should be made to believe that the pain may be arising from any overloaded joint, or some tensed muscle.
4. Physical therapy includes:

   (a) Bite-guards, e.g. Franks (1965)

(b) Psychological therapies – Psychotherapy should be given to the patient. Verbal communication should be used to do so. Methods are employed using psychotherapy in order to conceptualize together the abnormal mental condition, so as to know and judge the development of symptoms during the specific period of time, and also to cure the disorder resulting from this mental state.[9]

(c) Tricycle antidepressants – at night, in gradually increasing doses. E.g. Nortriptyline 10 – 20 mg initially, then 25 – 100 mg, with regular reviews at 3 to 6 weeks interval. If no response, 0.5 – 1.0 mg meniscus or Flupenthixol, at breakfast & lunch.

5. Dental treatment – confined to essential problems like caries, pulpal inflammation and occlusal disturbances.
6. Arthrotomography or arthroscopy – if there is continued pain and limited opening of mouth after 12 weeks of drug therapy.
7. If there is degenerative condylar surface then surgery is recommended.

6. Conclusion

Somatoform disorders let someone act like they're sick even when it's more about their mental well-being. This allows them to avoid taking responsibility for their life and instead, they take on the role of a suffering victim. Therefore, recognition of psychosomatic disorders is essential to diagnose and provide correct treatment to the individual suffering from the disorder. One of the way to provide a relief from stress is through counselling. The basic goal is to assist the individual in discovering resolutions to their issues, providing support and guidance through suitable advice.[9] Psychological therapies such as cognitive and hypnosis therapy, sedatives and antidepressants can also be given. Placebo treatment should be considered. Appliances such as Bite-guard should be given to individuals suffering from bruxism and trismus.

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8. Conflict of Interest

None.

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