

A Holistic Approach in the Management of Psychosomatic Diseases of the Oral Cavity-A Harmony in Health

Anuradha Ganesan^{1*}, Gautham Kumar¹, Swathi Kunnavakkam Vinjamur¹, Arul Jothi Murugan²

¹Department of Oral Medicine and Radiology, SRM Dental College, Bharathi Salai, Chennai-89, Tamil Nadu, India

²Department of Periodontics, Madha Dental College and Hospital, Chennai, Tamil Nadu, India

Abstract

Psychosomatic diseases of the oral cavity present complex challenges involving physical symptoms with psychological factors. Traditional medical treatments often fall short, necessitating a holistic approach that addresses both the mind and body to achieve harmony in health. This paper explores a multifaceted management strategy for these disorders, integrating pharmacological treatments, behavioural therapies, and supportive care. Pharmacological interventions remain essential, with antidepressants, anticonvulsants, and anxiolytics providing symptom relief. However, these are complemented by behavioural therapies such as Habit Reversal Training (HRT), which targets the elimination of harmful oral habits through awareness and competing response strategies. Cognitive-behavioural therapy (CBT) and mindfulness-based stress reduction (MBSR) also play crucial roles in addressing the psychological aspects of these disorders, promoting mental well-being and reducing symptom exacerbation. Biofeedback is a therapeutic technique that has been employed in the management of various psychosomatic disorders, including those that manifest in the oral region. This holistic approach not only alleviates physical symptoms but also addresses emotional and psychological distress, leading to comprehensive care and improved quality of life for patients with psychosomatic oral diseases. By harmonizing physical and mental health strategies, this method shows a balanced and effective model for managing complex oral health disorders.

Keywords: Cognitive Behavioural Therapy, Interdisciplinary, Oral Medicine, Psychosomatic, Temporomandibular Joint Disorders.

Introduction

In recent years, there has been a growing recognition of the intricate relationship between the mind and the body, particularly evident in the field of medicine. The manifestation of psychological stress, emotions, and unresolved conflicts in physical symptoms has long intrigued healthcare professionals, leading to the emergence of the field of psychosomatic medicine. Among the various bodily systems affected by psychosomatic influences, the oral cavity stands out as a crucial yet often overlooked area. The oral cavity serves as a

mirror reflecting not only our physical health but also our emotional well-being. Over recent decades, there has been an increasing recognition of the profound impact of psychological factors on oral health, giving rise to the field of psychosomatic dentistry. The oral cavity is susceptible to the impact of psychological factors, which can precipitate or exacerbate a range of oral conditions. These conditions, while primarily originating from psychological distress, present with distinct clinical manifestations within the oral cavity, posing diagnostic and therapeutic challenges to oral healthcare providers. The psychosomatic

diseases affecting the oral cavity are broad and encompass a spectrum of conditions ranging from temporomandibular disorders (TMD) and bruxism to oral mucosal lesions, burning mouth syndrome, and orofacial pain syndromes [1]. While these conditions may vary in aetiology and clinical presentation, they share a common underlying mechanism the emotional and psychosocial factors in their onset, progression, and response to treatment.

Understanding the psychosomatic basis of oral health requires a perspective that integrates knowledge from various disciplines, including dentistry, psychology, psychiatry, and psychosomatic medicine. By bridging these domains, we can effectively manage the intricate connections between mental states and oral manifestations, thereby paving the way for more effective management strategies according to individual patient needs.

Effective management of psychosomatic oral diseases necessitates a holistic approach that involves pharmacological interventions, behavioural therapies, stress management techniques, and psychosocial support services. To provide a treatment plan to address the underlying psychological and emotional disturbances, clinicians can alleviate oral symptoms to improve patient outcomes and enhance overall quality of life. Through collaborative efforts across disciplines, we can advance our understanding and management of psychosomatic oral diseases, ultimately improving the well-being of patients and promoting comprehensive oral health [2, 3]. The mind and body are interconnected, functioning as a unified system where each influences the other. Many illnesses are psychosomatic, involving both mental and physical components. Each physical condition has a psychological aspect, and individuals' responses and coping mechanisms can vary widely. Some diseases affecting the oral mucosa may directly or indirectly reflect emotional states or internal conflicts. It has long been recognized in medicine that mental or

emotional factors can serve as risk factors, potentially affecting the onset and progression of oromucosal diseases.

This manuscript will encompass the multidisciplinary approach to managing psychosomatic diseases affecting the oral cavity. By exploring the connection between psychological factors and oral health, we aim to elucidate the underlying mechanisms, clinical presentations, and evidence-based management strategies for these complex conditions. Through a comprehensive review of current literature, we seek to provide a holistic approach to the management of psychosomatic oral diseases.

Discussion

The connection between the mind and body can be understood through two main hypotheses. The specific hypothesis shows that particular diseases or illnesses manifest in response to specific stimuli, conflicts, or stressors. This occurs because the body exhibits a heightened response that continues even after the initial stimulus has ended, eventually leading to disease. On the other hand, the nonspecific hypothesis suggests that generalized stress creates conditions conducive to the development of various diseases, which are not necessarily predetermined. This hypothesis outlines four types of reactions to stress: healthy normal, neurotic, psychotic, and psychosomatic [4]. Oral psychosomatic disorders can be classified based on the underlying psychological factors and their manifestations in the oral cavity [5] (Figure 1).

Psychosomatic diseases affecting the oral cavity encompass a diverse range of conditions, each influenced by psychological, biological, emotional, and social factors. Among these, temporomandibular disorders (TMD), bruxism, oral mucosal lesions, burning mouth syndrome, and orofacial pain syndromes are commonly encountered in clinical practice. By understanding the psychosocial determinants underlying these conditions and adopting the

holistic approach, clinicians can address the multifaceted nature of oral diseases and plan the

treatments according to individual patient needs.

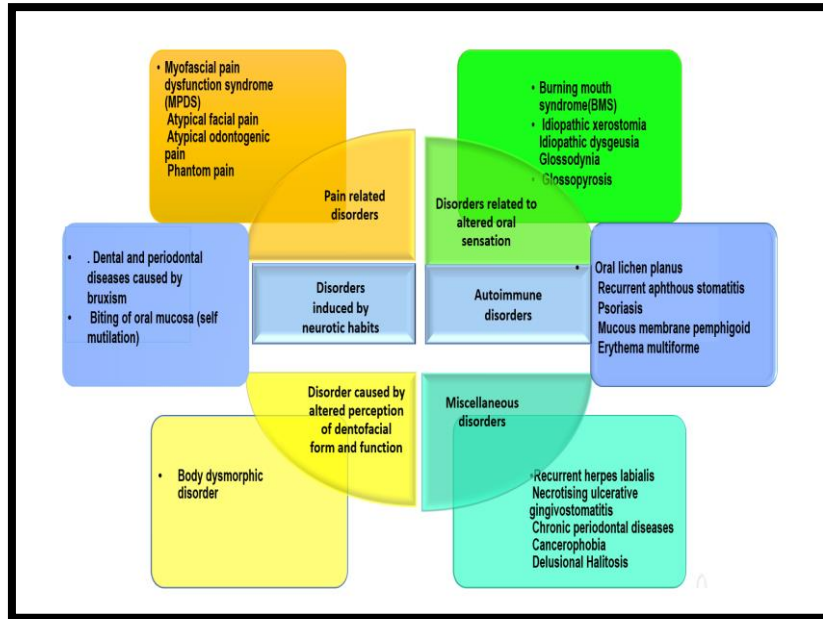


Figure 1: Revised Simple Working Type Classification Proposed for Psychosomatic Disorders

Diagnosis and Assessment of Psychosomatic Oral Diseases

Accurate diagnosis and assessment of psychosomatic oral diseases require a thorough understanding of both oral pathology and psychological factors. Clinical evaluation, imaging studies, and psychological assessments play complementary roles in identifying underlying stressors, emotional disturbances, and psychosocial factors contributing to oral symptoms [6, 7].

Treatment Approaches for Psychosomatic Oral Diseases

Effective management of psychosomatic oral diseases involves a multimodal approach that integrates pharmacological interventions, behavioural therapies, stress management techniques, and psychosocial support services. Pharmacotherapy may include analgesics, muscle relaxants, anxiolytics, and antidepressants, tailored to alleviate pain, muscle tension, and psychological distress. Behavioural therapies such as cognitive-behavioural therapy (CBT), biofeedback, hypnotherapy, Habit reversal training (HRT)

and relaxation techniques aim to modify maladaptive behaviours, reduce stress, and enhance coping skills [8, 9]. Additionally, psychosocial support services, including counselling, support groups, and referral to mental health professionals, play a crucial role in addressing underlying emotional issues and improving overall well-being.

Psychological Therapies

Cognitive Behavioural Therapy (CBT)

CBT is a widely used treatment for various psychosomatic disorders, including those affecting the oral cavity. Cognitive Behavioural Therapy (CBT) is effective in managing oral psychosomatic diseases, such as temporomandibular disorders (TMD), bruxism, and burning mouth syndrome. These conditions often stem from or are exacerbated by stress, anxiety, and depression. CBT helps by addressing the negative thought patterns and behaviours contributing to the symptoms. Through techniques like cognitive restructuring and stress management, patients learn to modify their responses to pain and stress, thereby reducing symptom severity. The

therapy can lead to improved coping mechanisms, decreased pain perception, and enhanced quality of life, making it a valuable adjunct in the multidisciplinary treatment of oral psychosomatic diseases [10, 11]. For burning mouth syndrome CBT can help reduce the perception of pain and discomfort by addressing underlying anxiety and depression. For Temporomandibular disorders, CBT assists in managing stress and anxiety, which can reduce muscle tension and alleviate symptoms [12].

Biofeedback

Biofeedback is a therapeutic technique that has been employed in the management of various psychosomatic disorders, including those that manifest in the oral region. Psychosomatic oral diseases are conditions where psychological factors significantly contribute to the manifestation and progression of oral symptoms. These include conditions such as temporomandibular joint disorders (TMD), bruxism (teeth grinding), burning mouth syndrome, and atypical facial pain. Biofeedback involves the use of electronic monitoring devices to measure physiological functions such as muscle tension, heart rate, and skin temperature. Patients are taught to control these physiological processes through relaxation techniques, cognitive restructuring, and mindfulness practices. The real-time feedback provided by these devices helps patients gain awareness and control over their physiological responses to stress and anxiety [13].

In Temporomandibular Joint Disorders (TMD) Biofeedback devices measure muscle tension in the jaw and surrounding areas. Patients learn to recognize the sensations associated with increased muscle tension and use relaxation techniques to reduce it. By reducing overall stress levels through biofeedback, patients often experience a decrease in TMD symptoms. In Bruxism Biofeedback helps patients become aware of

their grinding/clenching habits. EMG (electromyography) biofeedback is particularly useful in this regard. Once aware, patients can apply relaxation techniques to reduce the frequency and intensity of bruxism episodes, especially during stressful situations or sleep. Biofeedback is a valuable tool in the management of psychosomatic oral diseases. It helps patients gain awareness and control over their physiological responses to stress, ultimately reducing symptoms and improving their quality of life. When integrated into a holistic treatment plan, biofeedback can offer significant benefits for individuals suffering from conditions like TMD, bruxism, burning mouth syndrome and atypical facial pain [14].

Relaxation Training

Relaxation training is a cornerstone in the management of psychosomatic oral diseases. By incorporating relaxation techniques into treatment plans, patients can better manage their symptoms and improve their overall quality of life. Types of Relaxation Techniques include Progressive Muscle Relaxation (PMR) involves tensing and then slowly relaxing each muscle group in the body, starting from the toes and working up to the head. Helps reduce muscle tension in the jaw, face, and neck, which is particularly beneficial for conditions like TMD and bruxism. Deep Breathing Exercises focuses on taking slow, deep breaths to increase oxygen flow and promote relaxation. Can be used to manage acute episodes of anxiety or stress, which can trigger or worsen oral symptoms. Guided Imagery involves visualizing calming and peaceful scenes or experiences. Helps distract from pain and discomfort, reducing the perception of oral symptoms [15]. Autogenic Training combines visual imagery and body awareness to induce a state of relaxation. It helps manage chronic pain and stress-related symptoms by promoting a deep state of relaxation. Mindfulness-Based Stress Reduction (MBSR) is a structured program that uses mindfulness meditation to

reduce stress and improve overall well-being. Mindfulness Meditation focuses on being present in the moment and accepting thoughts and sensations without judgment. It can reduce stress and improve coping mechanisms for dealing with chronic pain and discomfort associated with psychosomatic oral diseases [16]. Biofeedback-assisted relaxation uses electronic devices to provide real-time feedback on physiological functions to help patients learn to control these functions. Relaxation training is an effective and non-invasive method for managing psychosomatic oral diseases. By reducing stress, decreasing muscle tension, and altering pain perception, relaxation techniques can significantly improve symptoms and enhance the quality of life for patients. When incorporated into a comprehensive treatment plan, relaxation training offers a holistic approach to managing these challenging conditions.

Hypnotherapy

Hypnotherapy is an increasingly recognized therapeutic approach to managing psychosomatic diseases. Hypnotherapy can help patients gain control over these symptoms by using the power of suggestion and the subconscious mind. Hypnotherapy involves inducing a state of focused attention and heightened suggestibility, often referred to as a trance state. In this state, the therapist can guide the patient to explore thoughts, feelings, and memories that may be contributing to their condition. Therapeutic suggestions are made to alter perceptions, behaviours, and physiological responses, which can help alleviate symptoms. Hypnotherapy offers a promising approach to managing psychosomatic oral diseases by addressing the underlying psychological factors that contribute to these conditions. Through techniques aimed at reducing stress, altering pain perception, and modifying behaviour, hypnotherapy can significantly alleviate symptoms and improve the quality of life for patients [17]. When used as part of a

comprehensive treatment plan, hypnotherapy provides a holistic and effective strategy for managing the complex interplay of psychological and physiological factors in psychosomatic oral diseases.

Habit Reversal Training

Habit Reversal Training (HRT) is a behavioural therapy designed to help individuals reduce or eliminate problematic habits or behaviours. It has been effectively used in the treatment of oral psychosomatic disorders such as temporomandibular joint disorder (TMD) and burning mouth syndrome (BMS), where habits like bruxism (teeth grinding) and oral parafunctional activities contribute to the symptoms [18]. Key Components of HRT are awareness training which involves helping the patient become aware of their habit. This includes identifying triggers, situations, and times when the habit occurs. Next is competing Response Training where patients are taught to engage in a physically incompatible behaviour when they feel the urge to perform the habit. For instance, if the habit is jaw clenching, a competing response might be to gently relax the jaw muscles. The next step is to encourage patients to stay motivated by keeping track of their progress, involving family members for support, and using positive reinforcement to celebrate successes. The last step is to ensure that the new, healthier behaviours are maintained across various situations and settings, helping to prevent relapse. For BMS, HRT can help reduce behaviours like excessive tongue movement or rubbing the tongue against the teeth, which can exacerbate symptoms [19]. Competing responses might include keeping the tongue at rest in a neutral position.

Pharmacological Treatments

The pharmacological treatment of these conditions often requires a pharmacological approach that includes psychotropic

medications to address the underlying psychological components.

Antidepressants

a) Tricyclic Antidepressants (TCAs)

Amitriptyline: Typically used for chronic pain and BMS. Dosage starts with 10-25 mg at bedtime, gradually increasing to 50-100 mg as tolerated. The maximum dosage can go up to 150 mg per day.

Nortriptyline: Also used for chronic pain. 10-25 mg at bedtime can be started with increasing dose up to 50-75 mg [13].

b) Selective Serotonin Reuptake Inhibitors (SSRIs)

Fluoxetine: Useful in managing anxiety and depression linked to oral disorders. 10-20 mg daily can be started with a maximum dosage of up to 80 mg per day.

Sertraline: Often used for anxiety and depressive symptoms. Start with 25-50 mg daily, increasing to 50-200 mg.

c) Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)

Venlafaxine: Effective for pain and comorbid depression. Dosage can start from 37.5-75 mg daily to a maximum dosage of 375 mg per day.

Duloxetine: Used for neuropathic pain and depression [20].

Anticonvulsants

Gabapentin and Pregabalin: Used for neuropathic pain such as that seen in BMS.

Gabapentin can be started with 300 mg at bedtime, increasing to 900-1800 mg divided into three doses.

Pregabalin can be started with 75 mg twice daily, increasing to 150-300 mg twice daily.

Benzodiazepines

Clonazepam: Sometimes used for its anxiolytic and muscle relaxant properties, especially in TMD. 0.25-0.5 mg at bedtime can be given, increasing to 0.5-2 mg daily in divided doses [21].

Diazepam: Can be used for its muscle relaxant and anxiolytic effects.

2-10 mg two to four times daily, depending on the severity of symptoms [22].

Topical Medications

Capsaicin: Used topically for BMS.

Patients are advised to apply a low concentration (0.025% cream) to affected areas 3-4 times daily as higher concentrations can be irritating [23, 24].

Others

Alpha-lipoic acid: An antioxidant used in BMS, with a dosage of 600-1200 mg daily.

Low-dose Naltrexone is a latest option for chronic pain conditions.

Additionally, supportive measures including physical therapy, dietary modifications, and patient education enhance overall treatment efficacy. Emphasis on patient involvement and adherence to treatment plans ensures a personalized approach, fostering better outcomes. Thus, interdisciplinary collaboration can be made, highlighting the roles of dentists, psychologists, and other healthcare professionals in creating a cohesive treatment framework.

Conclusion

The management of psychosomatic diseases affecting the oral cavity represents a complex yet rewarding endeavour that requires a multidisciplinary approach grounded in the principles of psychosomatic dentistry. By recognizing the intricate interplay between mind and mouth, oral healthcare providers can adopt holistic strategies that address the underlying psychological factors contributing to oral pathology. Through collaborative efforts across disciplines, we can advance our understanding and management of psychosomatic oral diseases, ultimately improving the well-being of patients and promoting comprehensive oral health. Continued research and education are essential

to advance our understanding and management of psychosomatic disorders in the oral cavity.

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Ethical Issues

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Conflict of Interest

None.

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