

PHANTOM BITE: A LITERATURE REVIEW

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ABSTRACT:

The most important thing you can do for your patient is to make a correct diagnosis'. The foundation for a successful treatment plan is an insightful diagnosis. We would only be able to diagnose, if we are aware of the condition. The aim of this article is to bring awareness among the dentist about a rare condition called "Phantom bite". Phantom bite is one such condition which needs to be diagnosed carefully, considering not only patient's occlusion but also the psychological status; such individuals are psychologically obsessed with their occlusion believing that it is abnormal though the dentist finds no evidence of abnormality. This review article provides the dentist with an overview of the important diagnostic features, need or the awareness and the treatment options for these patients.

Keywords: Occlusion, Occlusal dysthesia, Occlusal hyperawareness, Phantom bite, Stress.



INTRODUCTION:

Dentist sometimes encounters patients who have unusual oral complaints. Patients may present with a variety of subjective occlusal related complaints, upon examination, however, the dentist can find no evidence of a problem. Such unusual condition has been referred to in literature as "Phantom bite". In a survey conducted by Bozena et al ^[1] on US Orthodontists he stated that nearly 50.3% of the responding Orthodontists were unfamiliar with the term "phantom bite", however, many reported seeing patients with phantom bite complaints. He suggested a need for increasing awareness of this condition among dentists to provide patients with appropriate care.

What is phantom bite?

Phantom bite was first described by Joseph J Marbach in the year 1976 ^[2]. Phantom bite is a term coined to describe a single hypocondriacal delusion on the part of patients that their dental occlusion is abnormal ^[2, 3]. The delusion is sustained, often for many years, and rarely amenable to symptom directed treatment, for example, occlusal adjustment or prosthodontic restoration of the occlusion.

Phantom bite patients are intensely involved with and superficially knowledgeable about details of dental

anatomy, physiology, and restorative dentistry [3].

pain, gastrointestinal, sexual and pseudo-neurological symptoms.

Synonyms

1. Occlusal dysesthesia [4-6]
2. Persistent uncomfortable bite [7]
3. Occlusal hyperawareness [8]

Classification

Marbach had classified [9] the phantom bite patients into

1. Monosymptomatic hypochondriacal psychosis (MHP): This is more of a psychotic disorder which is an erroneous and unshakable belief in a distorted body image. The manifestations of MHP include delusional body image distortions such as in anorexia nervosa.
2. Dysmorphophobia: This is more of a neurotic disorder. The primary complaint is of a cosmetic defect, usually a sense of ugliness, in a person of normal appearance. They feel they are unattractive and undergo cosmetic surgery to correct the supposed deformity.

A more acceptable classification of Somatoform Disorders is [6]

1. Somatization Disorder: Historically referred to as hysteria, is a polysymptomatic disorder that begins before the age of 30 years extends over a period of years and is characterized by a combination of

2. Undifferentiated Somatoform Disorder: Characterized by unexplained physical complaints lasting at least 6 months that do not exceed the threshold for the diagnosis of Somatization Disorder.
3. Conversion Disorder: Unexplained symptoms or deficits affecting the motor or sensory function that suggest a neurological or other general medical condition. Psychological factors are judged to be associated with the symptoms or deficits.
4. Pain Disorder: Pain is the predominant focus of attention. Psychological factors are judged to have an important role in its onset, severity, exacerbation or maintenance.
5. Hypochondriasis: Preoccupation with the fear of having, or the idea of having a serious disease based on a person's misunderstanding of bodily symptoms or bodily functions.
6. Body Dysmorphic Disorder: Preoccupation with an imagined or exaggerated defect in physical appearance.
7. Somatoform Disorder not otherwise specified: Any somatoform symptom not meeting the full

criteria for the other specific Somatoform Disorders.

Age: Patients range from 20 to 80 years of age, while the mean age is 40 years.

Etiology :

1. Phantom phenomenon : This phenomenon has been explained by changes occurring as a result of the plasticity of the brain. When a lesion is made such that a person loses sensation from a particular area (as happens in, for example, limb amputation) the region of the cortex innervated by these missing nerves loses its input. After being silent for several weeks the cortical area can be activated again by other axons. The reorganised cortex can then continue to infer the existence of the missing part ^[10,11]
2. Occlusal hyperawareness or iatrogenic dysproprioception : Following changes in the dental occlusion it is necessary to adapt to or relearn new jaw movements. Klienberg suggested that phantom bite patients suffer because they are unable to adapt to even small changes in the dental occlusion ^[12].
3. Brain signalling and the neuro-matrix theory: The physical sensations can be felt without actual input from the body. They are generated by the brain, and although peripheral stimuli almost always precede the sensations, they do not directly produce them ^[13].

Sex: Equal predilection in both genders.

Race: Virtually all groups are represented by phantom bite patient, including those from Southeast Asia and the traditional Far East.

Socioeconomic status: Economic considerations provide a unique perspective from which to study the phantom bite patient. Complex and repetitive dental treatment is costly. Thus, a hierarchical system of phantom bite patients naturally develops along economic dimensions.

- Lower economic end of the spectrum of phantom bite patients are those who choose to have teeth extracted and seek with numerous new dentures or, at the very least, endless denture adjustments.
- High economic end of the spectrum of phantom bite patients are those wealthy and driven enough to undergo repetitive, extensive restoration of their natural occlusion.
- Middle economic end are the vast majority of phantom bite patients trapped between economic constraints and uncontrollable impulse. These unfortunate patients not only suffer a great deal, but perhaps more than those in the other two economic groups inflicting suffering on their treating

Prevalence ^[9]

dentists. Under economic pressures they engage in activities normally reserved for the dishonest. They do not pay their bills, they sue, and they spread untruths about the dentists. They are caught between the delusion that the right occlusal theory or the right articulator will solve their agony and the knowledge that it is beyond their economic scope to receive these treatments. Such dilemmas produce desperate people. The dentist should not underestimate the intensity and extent of the suffering involved.

Duration of illness: is generally equal to their age minus 10 to 20 years.

Clinical Features :

- The most important clinical feature is that they do what we call it as “Doctor Shopping” that is they travel from clinician to clinician in a quest to find a solution to their so called occlusion problem.
- They are usually heard of saying “bite is off” or “I lost my bite and am unable to find it” as a consequence of previous dental procedure [8] These patients are preoccupied with their dental occlusion and convinced that their bite is off and abnormal [7,9].
- The patient will be constantly checking their bite or attempting to reposition their jaw to find their bite. Frequently, the complaints are

long-standing and can occur at any stage of dental care ranging from simple fillings to more extensive restorative procedures, orthodontics or oral surgeries. Their perception of an abnormal occlusion persists despite repeated failed attempts to adjust the patient’s occlusion. These patients are persistent in seeking multiple opinions and are frequently unreasonable in their demands for their problem to be “fixed.”

- The Phantom bite patient frequently presents with “tedious” verbal and written monologs chronicling the details of their dental problems and types of previous treatments, why they have failed and what they consider to be necessary to correct the problem [7].
- They are invariably dissatisfied and angry with all of their dentists’ prior failures to resolve their occlusal complaints.
- They represent a regression to the infantile narcissistic state in which patients withdraw emotional involvement from other people and fixate on their physical selves [10].

Management:

Marbach “The best approach to the care and treatment of the patient with phantom bite lies in the dentist familiarity with the signs and symptoms of this syndrome.”

He recommended three modes of treatment for the phantom bite patient

1. Drug therapy: Drug therapy should be used as the last resort as these antipsychotic drugs are capable of causing extra pyramidal side effect. Marbach et al [9] have used pimozide successfully in treating MPH patients.

2. Psychotherapy: A psychiatric referral is a very useful though impractical as the patients will readily not accept such referral.

3. Strategies to be used by the dentist: Here we need to educate and motivate the patient. The patient should be motivated to learn to cope with occlusion and focus on other aspects of life. With time, delusion becomes encapsulated. Though these individuals still may believe there is an occlusal problem, Jagger and Korszun [8] has stated that, though the patients are focused on health problems they could be to a large extent reassured by the dentists explanation.

Patients with somatoform disorder perceive their symptoms as intense and noxious, and there is variability in the degree to which these symptoms are perceived as bothersome [14-15] Barsky, using a cognitive-behavioral perspective, has delineated four target areas for treatment that are important modulators of the intensity of a given symptom [16-18] They are Cognition, Attention, Context and Mood.

Cognition: Cognition is an important modulator of physical sensations. We

experience bodily sensations in terms of the information, beliefs, opinions and ideas we have about them. Two patients with identical symptoms may have very different reactions based on their information, beliefs, opinions, and ideas they have about their symptoms.

Attention: Attention to symptoms amplifies them, whereas distraction diminishes them. Patients who closely attend to their symptoms will experience a greater degree of these symptoms while those who manage to distract themselves will experience less intense symptoms.

Context: Context furnishes clues that are used to infer the meaning and significance of bodily sensations. This influences how intense and noxious the symptoms are perceived to be. Context also influences perception by shaping expectations of future experiences. A patient who has had someone close to them die of oral cancer may be much more likely to be overly preoccupied with oral symptoms and convinced they will ultimately prove to be cancer.

Mood: Depression, anxiety and other psychological factors may amplify bodily sensations. Anxiety, for example, results in perceived symptoms being more serious, dangerous and alarming. Depression, with its morbid self-preoccupation, can further amplify symptoms, resulting in an enhanced sense of hopelessness thus limiting the patient's sense of self-efficacy or control over their symptoms.

Cognitive-behavioral therapy for somatoform disorder focuses on targeting

cognitions, attention, context and mood. Cognitive-behavioral therapy treatment involves up to 10 individual sessions. The aims of the structured cognitive-behavioral therapy approach, as adapted from Allen ^[19] are as below.

Aims of cognitive-behavioral therapy for somatoform disorder

1. Reduce physiological arousal and reactivity through relaxation and mindfulness techniques.
2. Enhance activity regulation through increasing exercise and pleasurable and meaningful activities; teach pacing skills, yoga and meditations
3. Increase awareness of emotions; teach emotional regulation and tolerance of distress.
4. Modify dysfunctional beliefs through cognitive restructuring.
5. Teach distraction approaches.
6. Enhance communication of thoughts and emotions.
7. Reduce spousal reinforcement of illness behaviour.
8. Address co-morbid mood disturbance.

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CONCLUSION:

Dentists come across many unusual oral situations expressed by patients, example when pain is referred to a particular tooth not involved by periodontal or carious lesion. Other symptoms could be gnawing pain, unable to chew etc. One among the variety of symptoms presented by the patient could be related to biting and may need a closer look at the problem.

Owing to the great potential of this condition for financial loss and litigation problems, dentists particularly those who are involved in restorative or bite changing procedures should be aware of this condition. The goal of the treatment should not focus on symptom elimination but rather on improving the overall health and well-being of the patient. Further research should aim at recognising and treating this condition more efficiently.

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