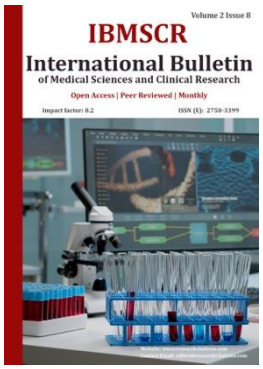

TREATMENT AND PATHOLOGY OF THE TEMPOROMANDIBULAR JOINT IN PATIENTS WITH PARTIAL MISSING TEETH

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Abstract: Justification the need to use an interdisciplinary approach to the treatment of patients with edentulous based on an analysis of literature data on the relationship between the clinical manifestations of orofacial pain, occlusion and temporomandibular joint pathology in patients with partially missing teeth. The classification, etiology and manifestations of orofacial pain syndrome are described. It is indicated that in most cases, when planning complex orthodontic rehabilitation, it is necessary to ensure the creation of certain mutually protective occlusal schemes by correcting the position of the jaws, in particular by ensuring acceptable occlusal vertical dimensions. The need to use an interdisciplinary approach to dental treatment of this contingent of patients primarily requires that patients with orofacial pain need to undergo a thorough comprehensive examination. In this regard, it is necessary to assess the condition of the temporomandibular joint using a set of instrumental and laboratory diagnostic methods. The importance of palpation of the cervical muscles is noted; this element should become a mandatory part of the standard examination of this category of patients. The most effective way to solve the problem of orofacial pain and pathology of the temporomandibular joint is a combination of dental, orthopedic and osteopathic treatment. In some cases, the methods of psychodiagnostics and psychocorrection are of primary importance. It is concluded that within the framework of a comprehensive interdisciplinary approach to the diagnosis and treatment of patients with edentia, it is necessary to use methods confirmed by the relevant evidence base in order to verify the prevalence of painful neuromuscular or occlusal-articular syndromes, as well as to assess their systemic impact on the biomechanical relationships of all elements of the maxillofacial system.

Keywords: adentia, temporomandibular joint, occlusion, orofacial pain, interdisciplinary approach, maxillofacial system, dentoalveolar system.

In recent decades, there has been an increasing number of reports on the relationship and importance of assessing pathological manifestations such as orofacial pain, VNP and changes in occlusion during the examination of edentulous patients requiring dental treatment and orthodontic rehabilitation. The role of TMJ disorders is shown; taking these pathological manifestations into account is extremely important when planning treatment and rehabilitation measures for this category of patients.

Types of adentia, anatomical and functional features of the dentoalveolar system that arise after tooth loss determine the choice and use of methods of treatment and rehabilitation measures using prostheses of different shapes, sizes and designs.

The aim of the work is to substantiate the need for an interdisciplinary approach to the treatment of patients with adentia based on the analysis of literary data on the relationship

between clinical manifestations of orofacial pain, occlusion and pathology of the temporomandibular joint in patients with partial absence of teeth.

Acute and chronic manifestations of orofacial pain syndrome are divided into 3 main categories: somatic, neurogenic and psychogenic. Acute pain in the maxillofacial region often manifests itself, for example, in conditions such as aphthous ulcers and pulpitis, and is relatively easily relieved. At the same time, chronic pain tends to be refractory, which makes it difficult to treat the manifestations of this syndrome. Somatic pain (in the area of soft or hard tissues) is usually characterized as dull, painful, throbbing, thermally sensitive.

Other methods are also proposed for assessing the manifestations of OPA: bone scanning, determination of C-reactive protein, interleukin-6, rheumatoid factor, and antinuclear antibodies. It is also proposed to assess the quality of sleep and the severity of manifestations of obstructive sleep apnea syndrome using appropriate questionnaires . It is also necessary to assess local muscle pain, for the determination of which myofascial trigger points are used, as well as the severity of centrally mediated myositis, although methods such as electromyography are characterized by relatively low specificity. Treatment of orofacial pain is carried out using a number of currently used standard and alternative methods, which include acupuncture, homeopathy, naturopathy, osteopathy, physiotherapy, and massage. In this case, methods of psychotherapy and traditional Chinese medicine are also used.

Specialists should provide a favorable atmosphere for the dental treatment, during which they should take into account the diagnosis and features of the treatment and rehabilitation measures (acute pain therapy, elimination of aberrant nociceptive effects on the central nervous system, the sources of which may be changes in dental occlusion, the presence of orthopedic hard acrylic resins, special stents, drugs for local use).

Comprehensive orthodontic, orthopedic and restorative treatment should be considered secondary to adequate treatment of the observed manifestations of patient discomfort and dysfunction of the maxillofacial system and the body as a whole. In dentistry, treatment of myofascial pain syndrome is often carried out using sprays and rubbing, less often injections of anesthetics are used. Drug therapy, including the use of preventive analgesic methods, should be prescribed based on the results of consultations with all specialists.Together with other specialists, patients with orofacial pain syndrome and TMJ dysfunction are prescribed sedatives, antidepressants, muscle relaxants, and antidepressants. The use of these drugs helps relieve the feeling of emotional discomfort, fear, and reduce the severity of spasm of the masticatory muscles and pain syndrome.

The effect on dysfunction of the temporomandibular joint has a positive effect of performing orthognathic interventions. A number of studies have confirmed the effectiveness of using splint therapy in the treatment of pain syndrome with occlusal disorders in the TMJ in combination with orthopedic and physiotherapeutic methods. It has been shown that occlusal splints change the nature of the closure of the teeth, affect the periodontium, masticatory muscles and the TMJ.

The researchers emphasize that the associations of the above-described clinical manifestations identified in this study indicate the importance of palpation of the cervical muscles; this element should become a mandatory part of the standard examination when there is a suspicion of TMJ pathology.

In recent years, there have been great achievements in the development of technologies for dental orthodontic care, including in relation to the treatment of orofacial pain,

temporomandibular pathology and occlusion disorders in the process of orthodontic, orthopedic and restorative treatment. Interdisciplinary multidisciplinary care has become a practical reality in the context of modern integrative health care. The multifactorial nature of the problem described in this article largely determines the structure of the necessary diagnostic and therapeutic measures when planning dental and orthodontic treatment and rehabilitation of patients. We agree with the opinion of a number of authors that the most effective in solving the problem of orofacial pain and TMJ pathology is a combination of dental, orthopedic and osteopathic treatment. At the same time, in some cases, the methods of psychodiagnostics and psychocorrection are of primary importance. It is necessary for doctors of different specialties to interact in order to comprehensively assess the clinical situation and develop an optimal diagnostic and treatment algorithm. As part of a comprehensive interdisciplinary approach to diagnosis, it is necessary to use diagnostic research methods with an appropriate evidence base in order to verify the predominance of painful neuromuscular or occlusal-articular syndromes, as well as assess their systemic influence on the biomechanical relationships of all elements of the maxillofacial system.

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