

## The use of orthopedic constructions in the prevention of periodontal diseases

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**Annotation:** The purpose is to increase the effectiveness of orthopaedic treatment of patients with periodontal disease. The main stages of orthopedic treatment of periodontal disease are: selective teeth lapping; the temporary splinting; orthodontic treatment (that might be selected after checking some special indications), the application of permanent splinting devices and prostheses. It is aimed to eliminate traumatic occlusion and traumatic articulation, the stabilization of motile teeth and the redistribution of chewing pressure by splinting. It is also aimed to restore the dentition defects. The dental treatment of periodontal disease is supposed to be done with the using of occlusive teeth aligners for such procedures as therapeutic and surgical sanitation, the orthodontic preparation and manufacturing the permanent prostheses.

**Key words:** periodontal disease, orthopedic treatment, occlusal teeth aligners.

The treatment of periodontal disease presents certain difficulties. Treatment of periodontal diseases can be effective only with an integrated approach that includes therapeutic, surgical, physiotherapeutic and orthopedic treatment. A comprehensive method of treatment involves the identification of etiological factors and a clear definition of the main links in the pathogenetic mechanism of the disease. This is necessary to determine the means of etiotropic and pathogenetic therapy, as well as to draw up a specific plan for managing the patient. The complex treatment of periodontal diseases can also include immunotherapeutic effects, methods aimed at increasing the level of vital activity of the organism as a whole, psycho-emotional state, improving social conditions of life, treatment of somatic diseases that contribute to the development of periodontal pathology. It should be noted that persons with comorbidities should undergo dental treatment only in remission or drug compensation.

Treatment of periodontal disease must begin with a thorough removal of dental deposits. It is also important to eliminate local factors that contribute to the accumulation of plaque

(gingival carious cavities, unrestored interdental contacts, overhanging edges of fillings, edges of artificial crowns deeply advanced under the gums, correction of the anatomical and topographic features of the teeth and jaws, orthodontic treatment of malocclusion, crowding of teeth, etc.).

For orthopedic treatment of patients with periodontal diseases, various removable and non-removable, temporary and permanent designs of medical devices are used. The indication for orthopedic treatment of periodontitis is primarily due to the need to immobilize mobile teeth and redistribute the load on teeth with unaffected periodontium or the mucosa of the prosthetic bed. The most important point is the elimination of functional traumatic overload of the periodontium by selective grinding [5], splinting and rational prosthetics. Therefore, the main stages of orthopedic treatment of periodontal diseases are: selective grinding of teeth; temporary splinting; orthodontic treatment (according to indications); the use of permanent splinting devices and dentures. The main value of orthopedic treatment of periodontal diseases is that it: allows you to remove inflammation; improves blood circulation; restores tissue trophism by eliminating pathological mobility; normalizes the occlusal ratio; relieves chewing pressure (functional therapy). Properly selected and performed set of orthopedic interventions, aimed not only at restoring defects in the dentition, but also at reliable stabilization of the remaining teeth, contributes to the normalization of occlusal loads, periodontal trophism and reparative processes in its tissues, thereby increasing the effectiveness of the treatment of periodontal diseases.

Occlusal mouthguards were made when removing functionally defective orthopedic structures, with multiple extractions of teeth, with long-term therapeutic treatment with restoration of the integrity of the anatomical shape of the tooth, etc. On average, patients used such mouthguards for 3-4 weeks, for the period of treatment by a periodontist. Orthopedic measures (splinting and fabrication of splints) were also carried out under the control of occlusal mouthguards. In this case, the kappa was relined for better fixation in the oral cavity. The treatment was completed with rational prosthetics. When planning an orthopedic construction, X-rays of all teeth were carefully studied. According to the testimony of 32 patients, periodontal splints were made from composite filling materials.

Ribbon or GlasSpan fibrous materials and light-curing flowable composites were used as reinforcement.

Splinting construction on fiberglass or polyamide thread reduces tooth mobility. Its rigidity does not allow the teeth to loosen, which means it reduces the likelihood of tooth loss. Thanks to splinting, we were able to redistribute the load on the entire reinforced fragment of the dentition. The more healthy teeth are included in the immobilization, the more pronounced will be the unloading of mobile teeth.

Treatment of oral leukoplakia is considered a complex process. Because every person has the skills to fight against the symptoms of this disease within his capabilities, he starts to follow the recommendations given to overcome the disease in a voluntary and compulsory way. Leukoplakia caused by a number of factors that we mentioned above, in particular, predisposition to hereditary diseases, anemia, chronic gastrointestinal diseases, consumption of vitamins in excess of the norm, or the main causes of harmful habits such as regular smoking, consumption of tobacco and other products. because it is somewhat difficult to overcome the disease. The instinct that has formed in people's minds weakens their will to get rid of their bad habits or to diet even for a certain period of time. In such cases, it is appropriate for the doctors and medical staff who started the treatment process to provide the patient with sufficient information about the root cause of the disease and about its side effects and complications, and to fight against the disease together. During the treatment, it is necessary to eliminate all the threatening factors that damage the mucous membrane of the oral cavity . For this purpose, complete sanitation of the oral cavity and removal of ill-placed crowns, prostheses or implants. If the appearance of this disease is caused by internal systemic diseases or pathological conditions, it is necessary to carry out their treatment first. Thus, in light leukoplakia of the oral cavity, which causes neuropsychic overloads, it is necessary to take a careful approach, remove the patient from depression, and avoid long-term emotional work.<sup>1</sup>

Thus, orthopedic treatment of patients with partial absence of teeth in periodontal diseases is carried out in a complex manner and has its own characteristics. It is aimed at

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<sup>1</sup> Rakhimov Dilmurodjon Adilzhanovich. LEUKOPLAKIA CLINIC, DIAGNOSIS, TREATMENT. 1- part «42-46».

eliminating traumatic occlusion and articulation, stabilizing mobile teeth and redistributing masticatory pressure by splinting, restoring dentition defects. Dental treatment of periodontal diseases must necessarily be carried out using occlusive mouth guards (therapeutic, surgical sanitation, orthodontic preparation, the manufacture of permanent orthopedic structures). Splinting of moving groups of teeth is recommended to be carried out with dental materials Ribbond or GlasSpan. As medical structures, to make dental-supergingival occlusive mouthguards. As permanent structures, use clasp splints or prostheses with a clasp fixation system.

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