



OPTIMIZATION OF THE PREVENTION OF ANOMALIES OF OCCLUSION OF THE DENTITION IN THE PERIOD OF TEMPORARY OCCLUSION

Mukhammed Erkinov Akramovich

Samarkand State Medical University

Begzod Tursunov Sherzodovich

Samarkand State Medical University

Akmal Roziev Akramovich

Samarkand State Medical University

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Abstract:

This article discusses in detail the optimization of the prevention of malocclusion during the period of temporary occlusion, the author's postoperative therapeutic protocol, which is very important for determining the final and permanent preservation of the corrected occlusion.

Keywords: occlusion, therapeutic protocol, surgical fixation, rigid fixation.

INTRODUCTION:

Surgical orthodontic treatment is generally recognized as the best therapeutic option for adult patients with maxillofacial disharmony, both in terms of teeth and skeleton. This treatment consists of four stages: preoperative orthodontic therapy, orthognathic surgery, postoperative orthodontic therapy and retention therapy. All of these steps are important for the success of orthognathic surgery, but this article focuses on the postoperative phase.

The goals of postoperative therapy are surgical fixation, restoration and rehabilitation of neuromuscular function, occlusal stabilization, selective tooth grinding, and definitive bite preservation. In the postoperative period, it is necessary to achieve the restoration of good neuromuscular function due to the gradual reprogramming of muscular and dentoalveolar proprioception in accordance with the new spatial position of the maxillary and mandibular skeletal bases.

LITERATURE ANALYSIS AND METHODOLOGY:

The definitive orthodontic and orthopedic treatment will correct the bite, which will be stabilized by good jaw spacing, proper neuromuscular function, and avoidance of parafunction. Obviously, after surgical correction of the jaws, adaptive changes in the orofacial complex contribute to the occurrence of relapse.

The approach presented here is characterized by a precise order of the various therapeutic phases, and this sequence is strictly related to the goals of postoperative orthodontic treatment. These goals are postoperative retention, restoration and rehabilitation of oral function, occlusal stabilization, retention and selective grinding of teeth.

Thus, active wires are used in connection with the necessary movements of the teeth. The completion of the treatment is no different from any other conventional orthodontic treatment. At this stage, maintaining a good condition of the periodontium becomes especially important. This contributes to the stability of the final result. At the final orthodontic stage, it may be necessary to modify the provisional restorations prepared before surgery, taking into account the planned final occlusion.

RESULTS:

The patient was instructed to use the positioner for 4 hours during the day and all night. After about 6 months, daytime use of the positioner is suspended, the device is lightened and made passive, and the patient is advised to use it at night to protect against possible parafunctions that can negate the result over time.

Selective teeth grinding is used to obtain a centered position of the mandible, with bilateral locking contacts, with the coincidence of the central relation and central occlusion. With regard to mandibular dynamics, the authors preferentially focus on canine guidance in lateral movements and incisal guidance in protrusion movements, in accordance with traditional teachings on occlusion.

DISCUSSION:

The most important goals of orthodontic treatment before surgery were tooth alignment to eliminate misalignment and crowding of teeth, dentoalveolar decompensation to eliminate dental compensation by tilting the anterior and lower teeth forward and tilting the anterior teeth of the upper jaw backward,



indicating the real extent of the sagittal skeletal defect and alignment of the dental arches in their final position, aligning them perfectly with each other.

For surgical treatment of mandibular deformities, the authors prefer methods of non-rigid fixation. The authors are aware that rigid fixation has a number of undeniable advantages, first of all, greater comfort for the patient in the postoperative period; it also has negative aspects that do not encourage its indiscriminate use. We believe that the biggest limitation of rigid fixation is the need for an absolutely precise surgical technique, especially when positioning the proximal segment of the osteotomized mandible. Rigid fixation also increases the risk of condylar rotation during distraction when the proximal segment is rigidly fixed to the distal segment.

CONCLUSION:

In conclusion, in surgical orthodontic treatment, proper control postoperative orthodontic phase is just as important as the preoperative orthodontic phase. A good final result depends not only on the initial diagnosis, but also on the accurate planning and execution of the orthognathic surgery. Postoperative orthodontic therapy is used to complete and refine the occlusion of the teeth in relation to the new skeletal relationship.

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