

15. EVALUATION OF THE RESULT OF SURGICAL ORTHODONTIC TREATMENT IN DENTO-MAXILLARY ANOMALIES CLASS III ANGLE. CASE REPORT

Author: Ciuclea Mihaela

Scientific adviser: Dumitru Sirbu, MD, Associate Professor, *Arsenie Gutan* Department of Oral and Maxillofacial Surgery and Oral Implantology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. Dento-maxillary anomalies (DMA) are common and create an inferiority complex for patients. In severe abnormalities, rehabilitation includes a combined surgical orthodontic treatment that restores the morphology of the jaws, facial aesthetics and functions of the stomatognathic system. The surgical phase of the orthognathic treatment includes risks and benefits, which must be discussed and explained to the patient in order to sign an informed agreement. Together with the doctor, the optimal treatment method is chosen according to the patient's wishes but also taking into consideration the anthropometric norms.

Case presentation. Patient Z.M., 23 years old, with the diagnosis of dento-maxillary anomaly class III Angle with mandibular prognathism, addressed with aesthetic and functional chief complaints, in order to perform the second phase of the orthognathic treatment, after finishing the orthodontic decompensation phase. The treatment plan and making of surgical guidelines were accomplished due to thorough examinations : photostatic examination, orthopantomography, cone beam computed tomography, teleradiography, intraoral scanning, study models and digital planning programs. There has been performed a bimaxillary orthognathic surgery, le Fort 1 segmental osteotomy with advancement of the upper jaw combined with a bilateral sagittal split osteotomy (BSSO) and lower jaw distalization. Intermaxillary immobilization in a presurgically determined position using surgical splints. The recovery period went according to the operational trauma, without any complications

Discussion. Postsurgically, we noticed an improvement in facial aesthetics which are supported by the values of skeletal and soft tissue cephalometric indices and an amelioration of the functions of the stomatognathic system, as a result of restoring the correct position of the jaws and obtaining a physiological occlusion

Conclusion. Orthognathic treatment is a safe method of treating patients with dento-maxillary anomalies, which improves their daily lives. The benefits of the surgery greatly outweigh the risks, which in turn can be enhanced by the use of modern virtual planning techniques such as anatomical models and osteotomy guidelines.