

DIGITAL WORKFLOW IN ORTHOGNATHIC SURGERY

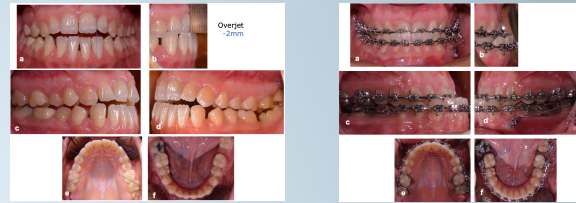
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Introduction:

Congenital or acquired craniofacial deformities require a multidisciplinary approach, the common goal is to study the patient with craniofacial deformities and evaluate the application of surgical and orthodontic treatment to create occlusal and facial harmony. Technological advances in recent years have allowed surgeons to be more accurate and improve patient care. The use of a digital platform for planning and simulation of facial movements has now become a routine in many specialized centers, but it is necessary to remember that this must be accompanied by a surgeon deep knowledge of the maxillary function, long-term stability and facial aesthetics.

Object :

❖ The patient's study starts from the analysis of the occlusal framework and from orthodontic decompensation therapy operated by orthodontists.



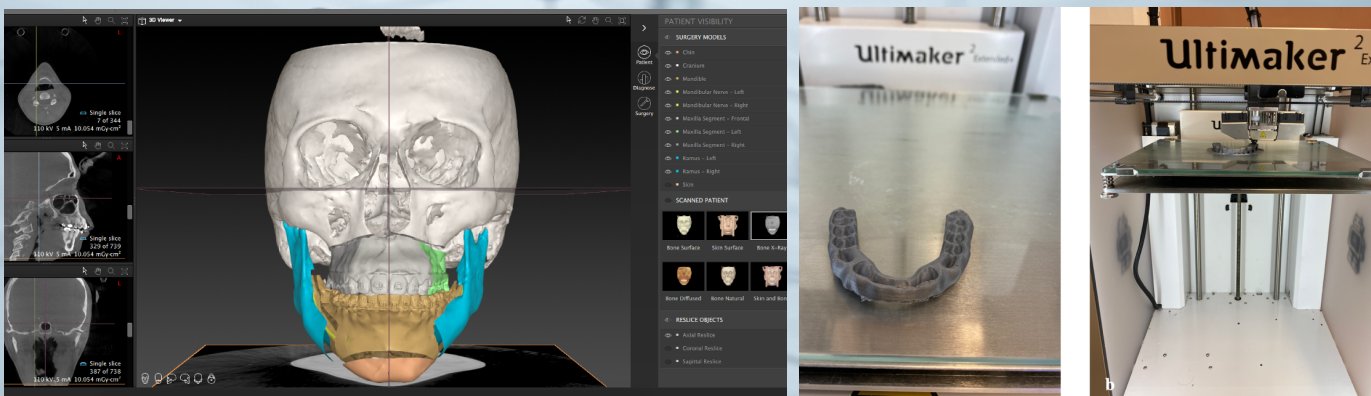
❖ Now in the attention of the maxillofacial surgeon the patient will be subjected to an accurate examination in which a facial analysis and 2d photography are carried out in order to allow the surgeon to understand occlusal abnormalities and facial dysmorphisms.



❖ The next step will be to acquire the necessary data for surgical planning. The patient will be subjected to a Cone beam CT and the acquisition of 3d photos of the face and intraoral scans.



❖ Through the use of dedicated software, the surgical planning of the patient is carried out by simulating the osteotomy lines and the lower&upper jaw movements, planning an occlusal intermediate & final splints that will allow the surgeon to transfer digital planning to the operating table.



Results:

A reliable and standardized planning on 3D images will allow the surgeon to obtain more predictable and controlled results in order to reduce the operating time with benefit for the patient and for the success of the surgery.



Conclusion:

The digital planning in orthognathic surgery is certainly a fundamental step that must be respected in order to improve the result and to involve the patient in the surgical procedure that he will undergo.