

The Reverse Planning: Stages in Total Edentulous Patients for Implant Dentistry

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With the advent of the Implant Dentistry, nowadays consecrated by high success and survival rates, simple osseointegration as a success criterion has lost space for some other important concepts, such as the three-dimensional positioning of implants, the relationship between diameter and height of dental implants, and the insertion level of the installed implants.

Reverse planning represents a possibility of a better prior diagnosis of stomatognathic limitations with patient participation in every stage of treatment evolution, where it will follow the evolutionary treatment process, observing how the dental surgeon wishes to finalize the case and approving the steps during the preparation. With this, it is possible to verify the degree of satisfaction with the treatment and specific morbidities previously not thought in the implantology.

Following this concept of reverse planning for the fully meshed arch, the steps to be followed are:

- Clinical analysis of mucosal flaccidity of the alveolar ridge (very present in total edentulous patients);
- Molding using material with hydrophilic characteristics, to make the study model, avoiding in the initial phase any pressure or change in the position of the alveolar mucosa;
- Creation of an individual acrylic resin tray with peripheral sealing to obtain a better flow of material during molding. With this, avoiding any alteration or pressure in the alveolar mucosa;
- With the previous frame, will be made the master model is faithful to the tissue positioning of the edentulous edge.
- After the creation of a working model, the production of base plate and dental modeling wax is started to develop the central markings of the three-dimensional positioning of the dental elements in this prosthesis;
- In the design of the dental prosthesis, the anterior flange is removed in the premaxilla region so that it is possible to verify the best positioning of the stomatognathic musculature in the lower third of the face. (it is now possible to diagnose whether or not a hybrid-type prosthesis or a hybrid prosthesis fitted with a lip contour compensation or an indication of a removable prosthesis with lip compensation);
- Finishing this stage, the development of the treatment will continue with the assembly of the dental elements and the occlusal alignment of the dental arches with posterior revision of the muscular positioning;
- After the entire positioning review, the duplication phase of this prosthesis started for the preparation of the multifunctional surgical guide (preferably colorless, to show areas of pressure in the mucosa);
- With the installation of the implants, the union phase initiated using a transferor. The multifunctional guide will have the function of positioning a dental occlusion and the final positioning of the implants;
- In this way, it is possible to start the final production of the prosthesis with greater accuracy, due to the references obtained in the previous steps.

Through this planning modality, in total edentulous patients, with the possibility of anticipating the results, it becomes easier to understand patients' treatment. Being facilitated the execution by the dental surgeon.

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