

CASE REPORT

Immediate loading full-arch rehabilitation in a patient on anticoagulant therapy with computer-guided implant flapless surgery

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ABSTRACT

Computer guided implant planning has become an important diagnostic and therapeutic tool in modern dentistry. A 81-year-old patient with heart disease and previous myocardial infarction wearing a total upper prosthesis, comes to request a fixed rehabilitation on implants. Due to the patient's general health conditions, it was decided to proceed with a minimally invasive guided flapless surgery, placing 5 implants on the maxilla loaded after 24 hours with Toronto prostheses. Using the flapless technique, the patient had no post-operative bleeding or edema

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KEY WORDS: Surgery, computer-assisted; Rehabilitation; Dental implants.

Computer-assisted implant planning has become an important diagnostic and therapeutic tool in modern dentistry.

Patients who have been edentulous for some time usually have an alveolar process that has already been resorbed, therefore most of the time they do not need an osteotomy to insert the implants in the basal bone¹

The guided surgical technique with flapless access is particularly indicated in the case of patients on anticoagulant therapy, in order to avoid as much as possible the post-operative bleeding that can be caused by the cut of the surgical access and the preparation of the flap.

Case report

An 81-year-old man with various heart conditions, wearing a total upper prosthesis, requires treatment for fixed rehabilitation of the maxillary arch.

Radiographic examination with orthopantomography shows bone resorption compatible with age and a residual of fractured implant fixture in site 27. Given the regularity of the residual bone, it is not necessary to perform osteotomies or osteoplastics of the alveolar process.

Due to the patient's clinical conditions, it was decided to proceed with rehabilitation by means of the positioning of implants inserted with surgical guide and flapless technique. The prosthetic case study is then performed with an aesthetic and functional test of the temporary prosthesis.

Afterwards CBCT is performed with the use of a radiopaque device placed on the upper arch on the duplicated transparent resin prosthesis. Thanks to this device (EVO-bite), the radiography is performed with precise radiopaque marks for the radiographic study and the creation of the surgical guide. The surgical guide with mucous support and bone fixation with PIN is then performed (JDental Care laboratory, Modena, Italy).