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**CAMARLENGO**

Dental Institute  
Teaching for a Healthier Community

# POST-EXTRACTION IMPLANTS

Post-extraction placement is a relatively recent methodology that has been developed in the last ten years. The fundamental requirement that has led to the birth of this procedure is associated with the desire to shorten treatment times, and above all, the need to preserve the alveolar structures, that without it, would be destined to atrophy. Indeed, in "traditional" implantology, bone healing of the site constitutes the basic requirement to place implants in the place of extracted teeth. Said healing generally takes place in a period of not less than three to six months. But, as we know, it is precisely in that period of time when a large part of the bone resorption and gingiva remodeling following the extraction takes place, which leads to a biological and aesthetic limitation as well as functional. Which manifests itself both horizontally as vertically, conditioning on many occasions the possibility of resorting to implant treatment. (Guglielmotti MB; Cabrini RL1985).

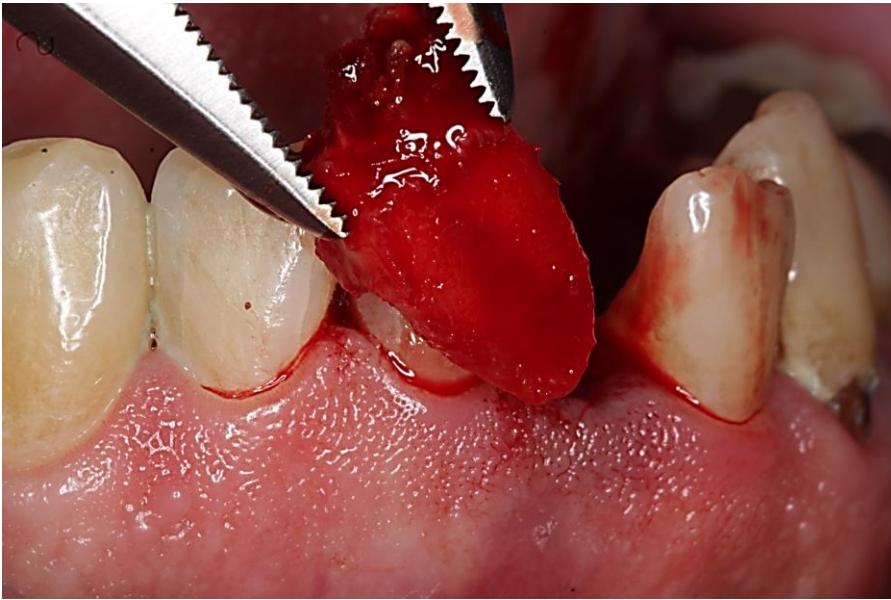
Post-extraction implants solve this problem, allowing the alveolar structure preceding the extraction to remain almost unchanged. To these anatomical-functional considerations is added the growing demand to perform prostheses that provide the best results also from the aesthetic point of view.





Each Karl Schumacher instrument is thoughtfully designed and produced using leading technology and hand-finished craftsmanship and coatings, which include medical-grade stainless steel and titanium alloys. These premium materials are expressly identified and purposed for each tool's optimum performance. After compression molding and punching, CNC machines turn, mill, grind and shape each instrument. They are then hardened, dressed, and finished by hand. This superior method ensures precision and quality.

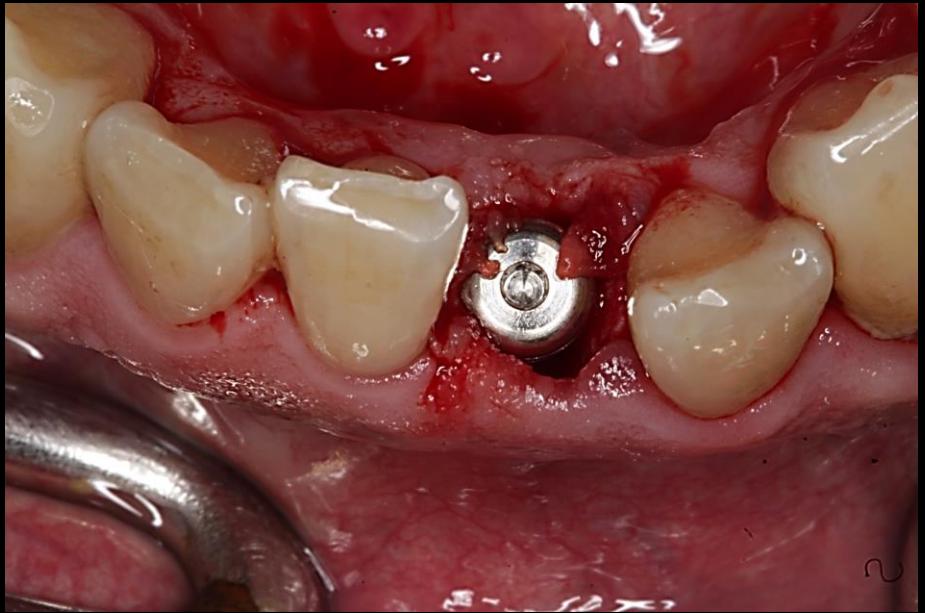
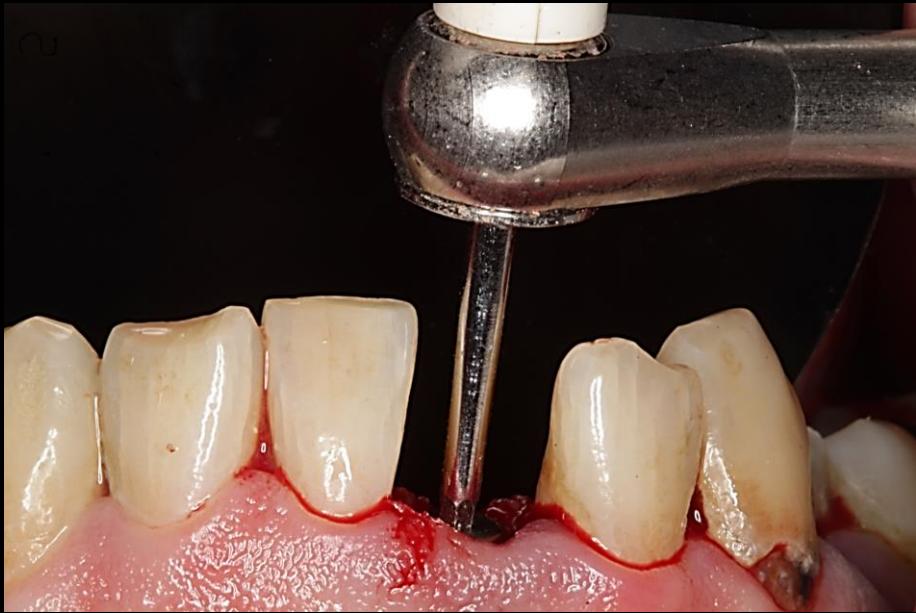


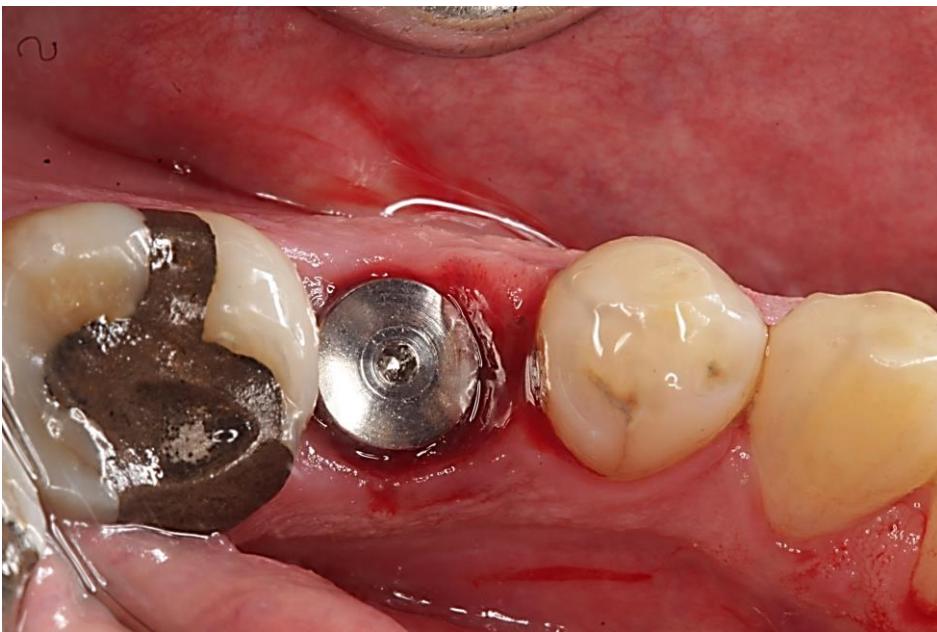
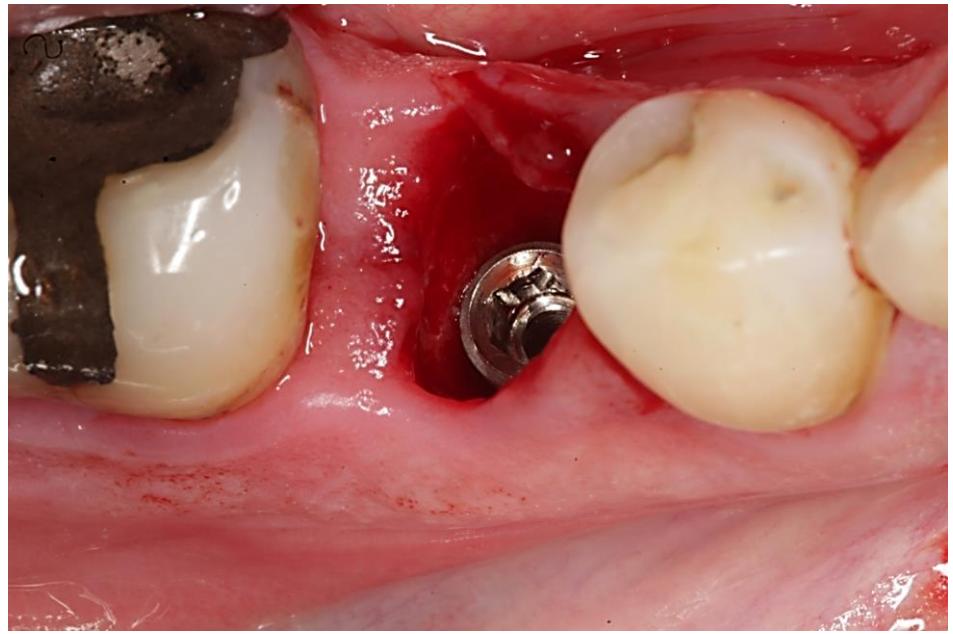
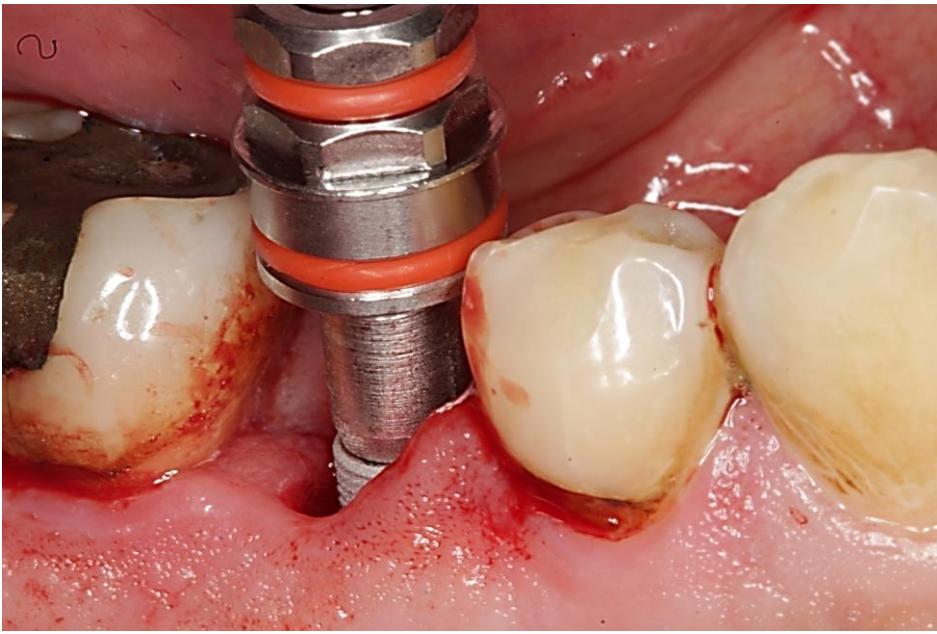


## BIOMECHANICAL CRITERIA

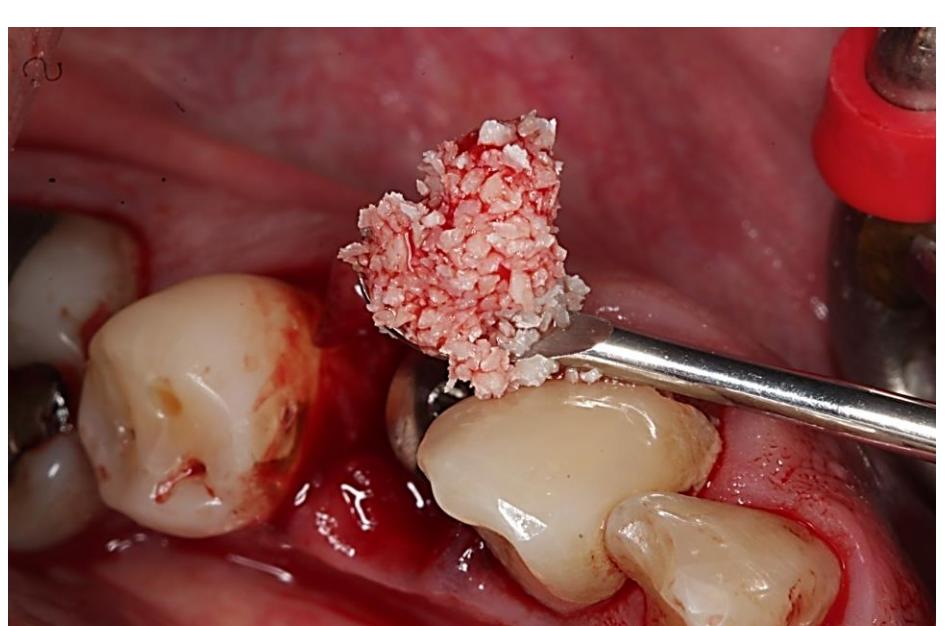
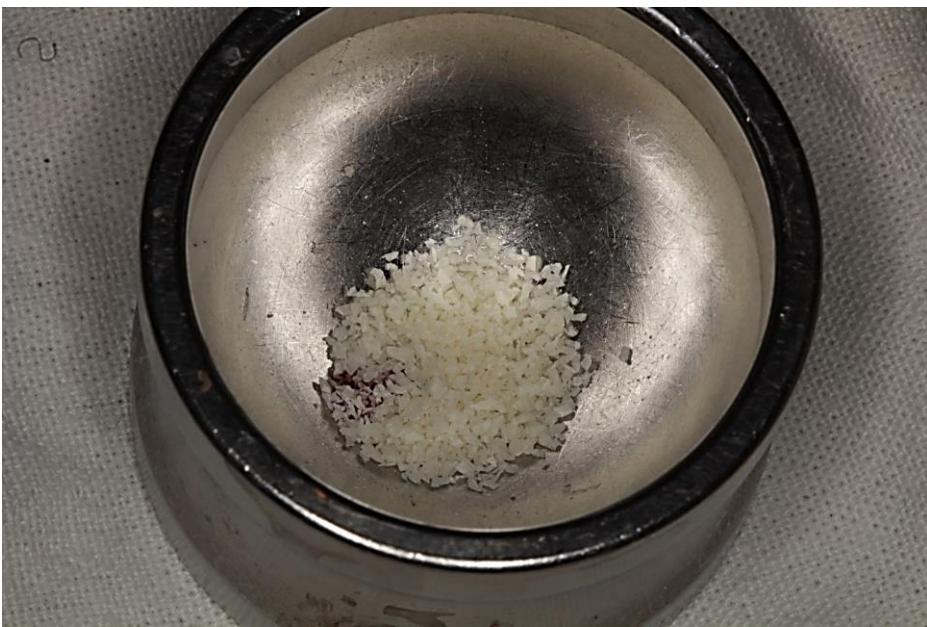
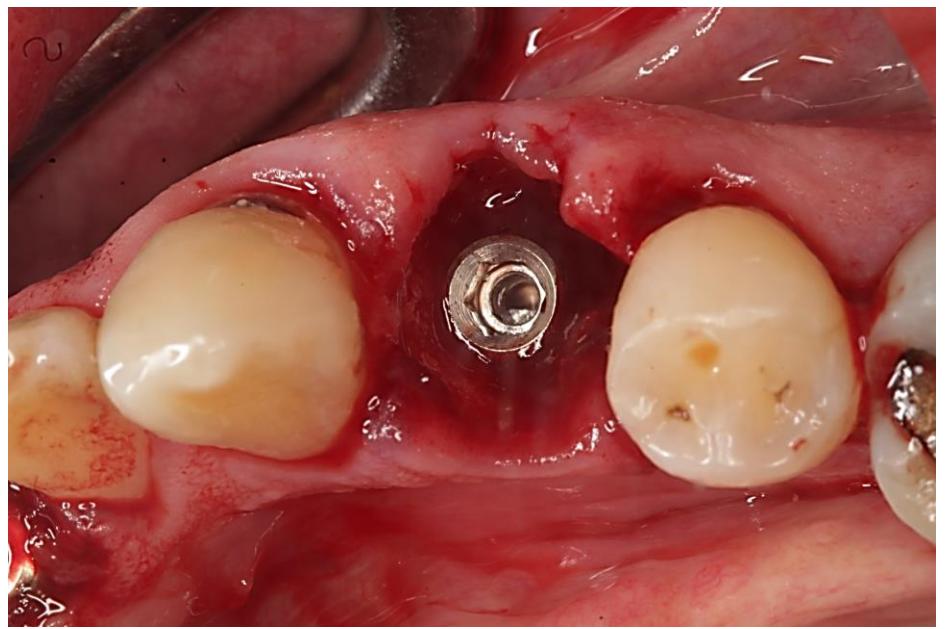
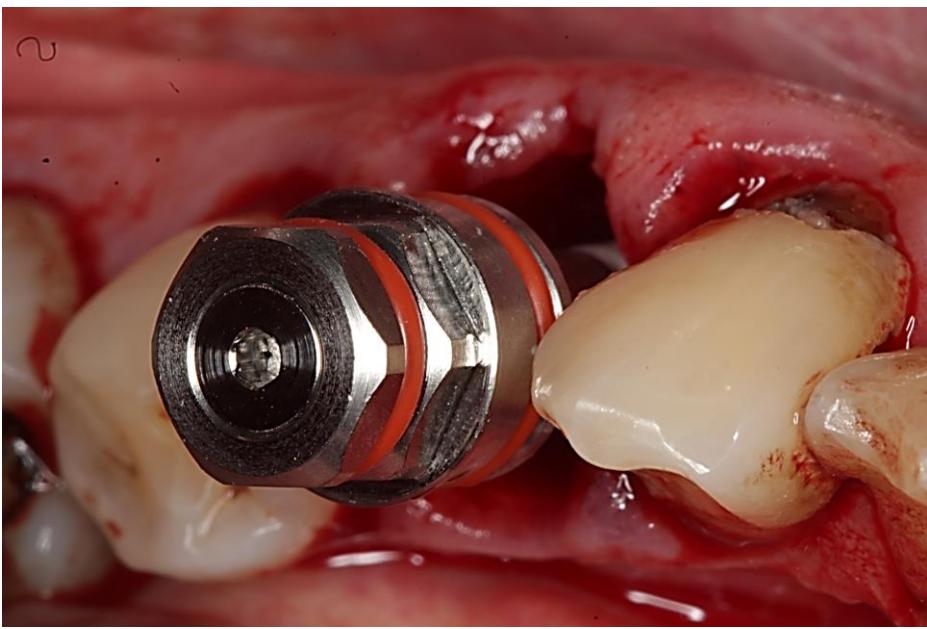
From the biomechanical point of view, the implants must adapt in number and dimensions to the planned prosthesis. They must be in the optimal direction and position to obtain a good distribution of occlusal loads.

Finally, but equally important, when osseointegration has taken place, the prosthesis load will be progressive, remodeling the provisional prosthesis in a timely manner.

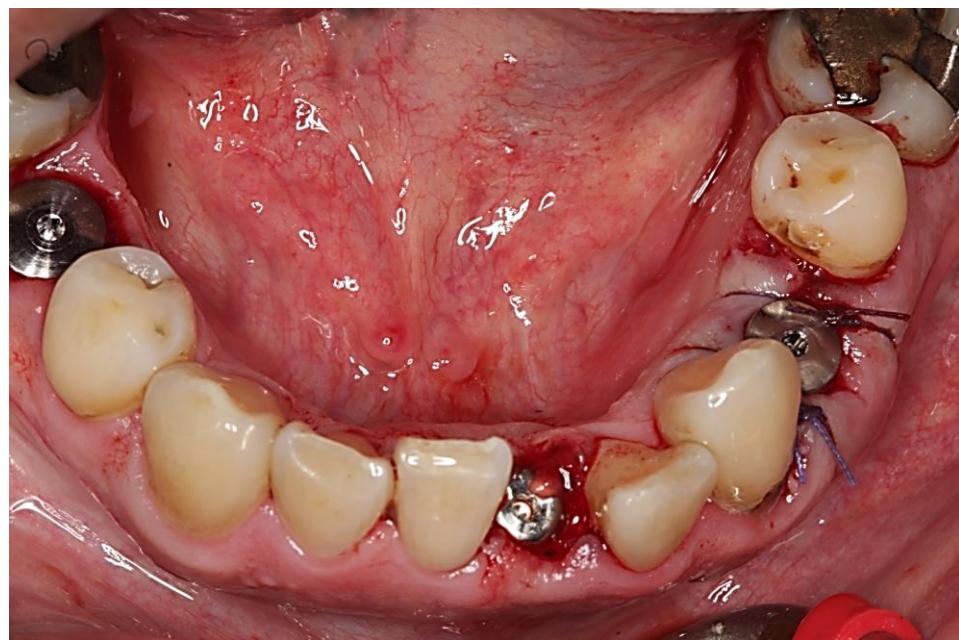
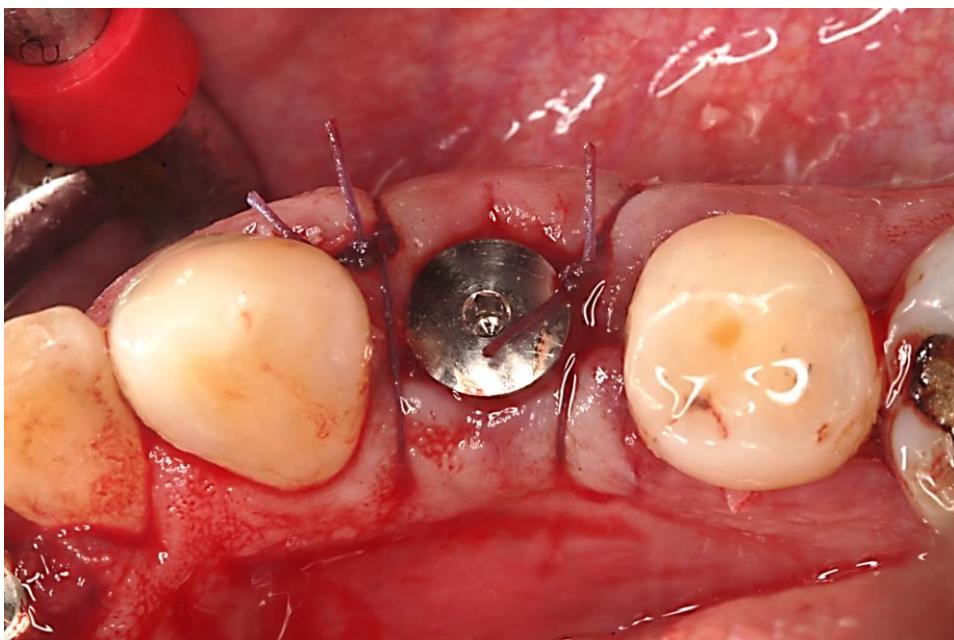
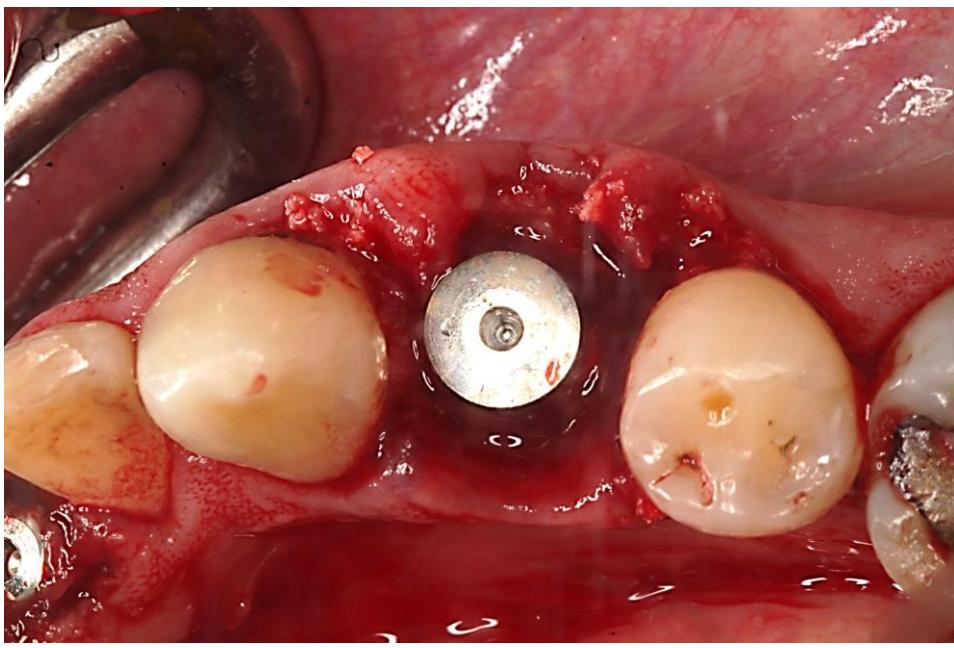




The peri-implant mucosa consists of a barrier epithelium 2mm long and 1-1.5mm of "integrated connective tissue". The soft tissue, including a binding epithelium has an apico-coronal length of 2mm and is separated from the bone ridge by an area of connective tissue binding 1mm in length. Most of the fibers around the implant are apparently anchored to the periosteum of the bone crest. The scars guide the formation of soft tissues after implant placement in a situation of single-phase surgical protocols, or after the discovery of the implant in a two-phase surgical protocol. These attachments are selected according to the thickness of the mucosa and the diameter according to the piece that will be replaced with prosthetic rehabilitation. The three-dimensional prosthetic space and the thickness of the mucosa are studied in the selection of scars. Because the scar should have the same design of the abutments or intermediates in the subgingival portion, it is important that it be selected according to the height of the gingival tissue and also with the same diameter of the abutment that will be used later. The concave area will offer conditions for tissue growth and the choice of the abutment must respect the contour formed by the scar. If the region requires more security in relation to the subgingival space, the abutment may be chosen with a lower profile, however, prior anesthesia should be performed, the abutment must be installed and the tissue should be properly accommodated to proceed with applying the torque, as this could cause discomfort.

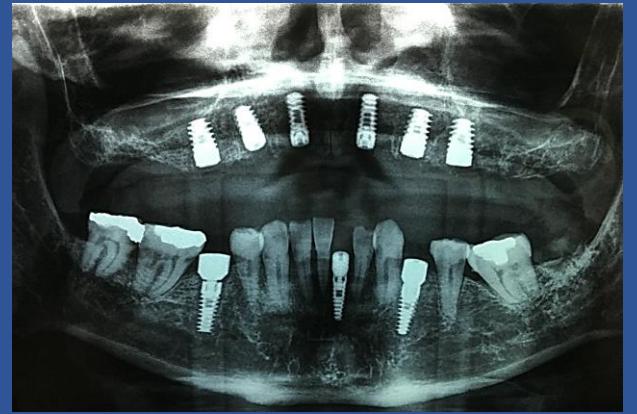
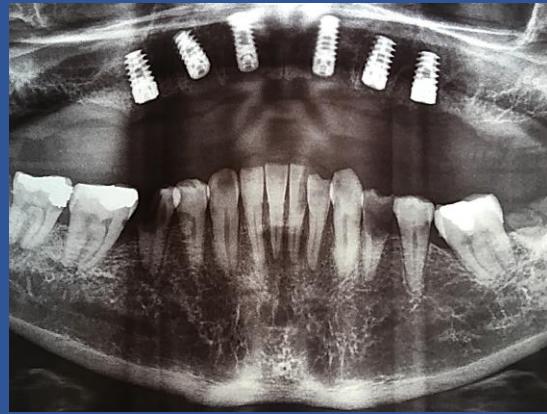


The use of grafts as an alternative for the reconstruction of bone defects, whether congenital or caused as trauma, oncological and infectious sequelae, are intended to restore the anatomical and functional integrity of an altered structure. For decades, researchers have been given the task of finding in the grafts certain characteristics that respond to each of the reconstruction needs; This fact has led to study and compare the benefits of some potentially donor bone structures or heterologous grafts such as those shown in the photographs above, which increase the chances of treatment success and significantly reduce the possible risks and complications during bone tissue regeneration.



## CONCLUSIONS

Immediate implants have a high success rate, according to different authors it is between 92.7% (12) and 98.0% (13). - Faced with an indication for extraction, the immediate implants shorten the waiting time in their rehabilitation, also reduce bone resorption of the residual alveolus and avoid a surgical act. - A chronic periapical pathology is not a contraindication for immediate implantation, as long as it is performed under antibiotic therapy and with a thorough curettage of the bone bed.



## Radiographic tracking



Final result of post-extraction implant placement. Galaxy (GLY) Nano-Implant Surface SLA.

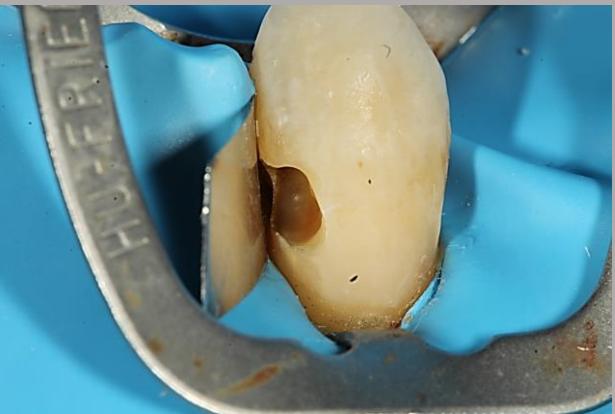
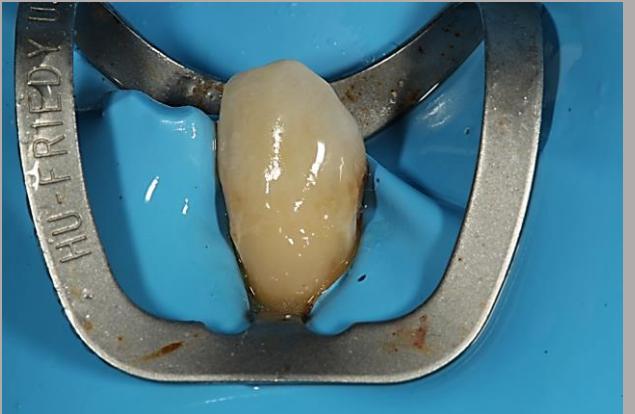


The SLA Galaxy Nano-Implant surface, short for «Sand-blast, Large grit, Acid-etch» is based on large aluminum oxide  $Al_2O_3$  particles sandblasting technique that generates a macro-roughness on the titanium surface.

Sandblasting is followed by acid-etching batch at high temperatures. As a result, subtle-sized 2-5 micron micropores appear at the implant surface. This unique macro/micro-topography provides an ideal structure for the cell attachment while reducing the possibility of a bacterial colonization.

SLA surface treatment technique seemed to be one of the most studied and best documented in modern dental implantology.

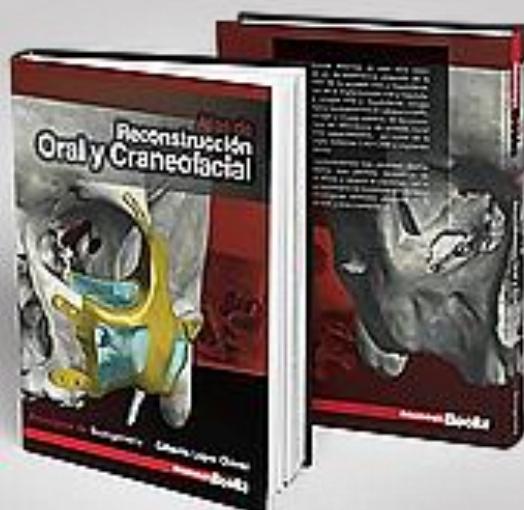
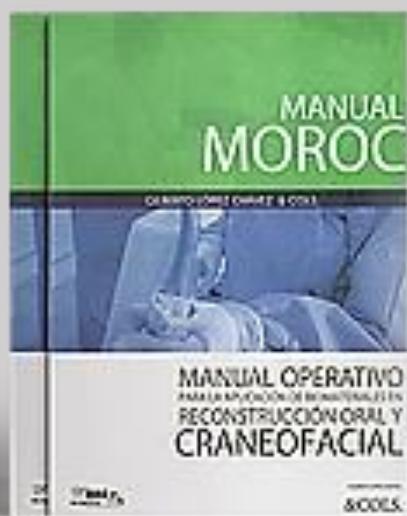
Cell culture tests, histological studies of bone, all confirmed its strong long-term performance, high mechanical stability and a low ratio odds of developing peri-implantitis. This is making the SLA a perfect choice for the contact surfaces of implants.



In the field of Dentistry, the best tool to achieve optimal oral health and success in the treatments that are imposed, is the prevention of the most common diseases in the oral cavity, as is the case with Caries and periodontal disease.

Tetric N-Bond Universal is a photopolymerizable single-bottle adhesive for direct and indirect bonding procedures, compatible with all engraving techniques: self-etching, enamel selective etching and total etching.

The use of high-quality materials guarantees us long-lasting aesthetic prostheses with unmatched results. López G. 2019.





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- 2020 IMPLANT DENTISTRY Regenerative Oral Surgery
- Manual MOROC: Operational Manual for the Application of Biomaterials in Oral and Craniofacial Reconstruction



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