Two elements bridge with intramucosal post-extraction implants

Prof. Marco Gargari, Dr. Federico Guzzo, Dr. Mirko Martelli, Rome, Italy

The patient, female, 55 years old, came to our observation with pain and mobility of the elements 4.4 and 4.5. A bridge was previously made on the same two elements subjected to root canal therapy and restored with posts in biomedical alloy. The patient denied recent or remote systemic disorders in her medical records and was able to sign informed consent. During the clinical evaluation, the elements resulted proved hopeless: the periapical radiograph of the element 4.4 shows an apical lesion of endodontic origin; moreover, the bridge 4.4-4.5 presented a grade 2 mobility. Given the need for prosthetic recovery, for the elimination of the present inflammatory process and the impossibility of recovery by endodontic re-treatment, in agreement with the patient both elements were extracted and replaced with two Prama implants, chosen for the particular design of the neck.

To proceed with a post-extraction insertion, the vestibular bone wall was preserved both in thickness and height during the avulsion phase. The apical bone volume permitted to insert the implant beyond the post-extraction sockets and therefore to obtain a good primary stability of the fixture after insertion. In addition to the width, also the height and the inclination of the alveolar crest and the height of the alveolar bone near the adjacent teeth allowed to proceed with a post-extraction insertion with excellent chances of success.

Furthermore, to have a greater control over aesthetic profiles, at the insertion time we chose Prama implant by Sweden & Martina; in fact, the convergent portion allows a submerged positioning of the implant with respect to the lingual side of the alveolus. This versatility in positioning is linked not only to the three-dimensionality of the implant neck, but also to the UTM surface finishing: the micro-thread has proved to be an ideal substrate both for hard and soft tissues.

During the 3 months after surgery, the implants were left healing with the Prama IN healing, which close on the implant neck embracing it for 0.5 mm and which help the rapid conformation of a thick and healthy mucous tunnel, characterized by a clearly visible creeping. Once the soft tissue maturation was considered complete, a definitive zirconium-ceramic screw retained bridge is made. Initially the prosthesis caused a light tissues ischemia since the emergence profiles were designed to refine the conformation initially obtained with the healing abutments. After about ten minutes soft tissues were already adapted to the new morphology and the patient didn't report any discomfort or pain. The patient was included in a 4-month professional hygiene recall program and was subjected to oral hygiene instructions.

Follow up was performed at 3-6-12-24 months. The implants were clinically and radiographically healthy. The aesthetic aspect met our and patient's expectations. We did not observe inflammatory processes in proximity to marginal tissues, nor bone or tissue recessions.

"The convergent neck of Prama implant has perfectly adapted to these post-extraction sites, both characterized by vestibular dehiscence. Thanks to the UTM finishing, suitable for both soft and hard tissues interaction, no tissue regeneration technique was necessary."

(cit. Prof. Marco Gargari)













- 1. Pre-operative lateral view.
- 2. Initial radiograph.
- Prama implants insertion into the post-extractive sockets and evidence of vestibular dehiscence.
 Positioning of Prama IN healing abutments, embracing the implant neck for 0.5 mm, and suturing of the flaps around them.









^{5.} Clinical and radiographic follow up at 3 months.6. Transgigival path aspect after 3 months, obtained by maintaining an excellent level of home hygiene by brushing with soft bristles and by rinses with 10-volume hydrogen peroxide diluted to 50% or specific mouthwash.

^{7.} Impression taking with Pick-up transfers.











- 8. Soft tissues control at 6 months: vestibular, lingual and occlusal views.9. Manufacture of screw-retained temporary prosthesis and conformation of the tissues at 6 months.













- 10. Views of the definitive restoration made in zirconium-ceramic with titanium connector.
- 11. Soft tissues aspect before and after the positioning of the definitive prosthesis: it is possible to appreciate a controlled compression of the peri-implant soft tissues.







^{12.} Follow up at 24 months: vestibular view and lingual detail.13. Radiographic control at 24 months.

Ask for your free copy of the book

PRAGMATICO

at this <u>link</u>

