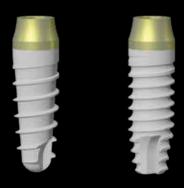


PRAMA. Unique BECAUSE:



"The clinical experience with this implant has allowed us to think of other possible applications in implantology that go even beyond the B.O.P.T. technique. I couldn't imagine such evolution for this implant."

Ignazio Loi

From his pre-congress course during Sweden & Martina Premium Day 2017



PRAMA

Prama implants are available in two endosseous shapes, cylindrical and tapered.

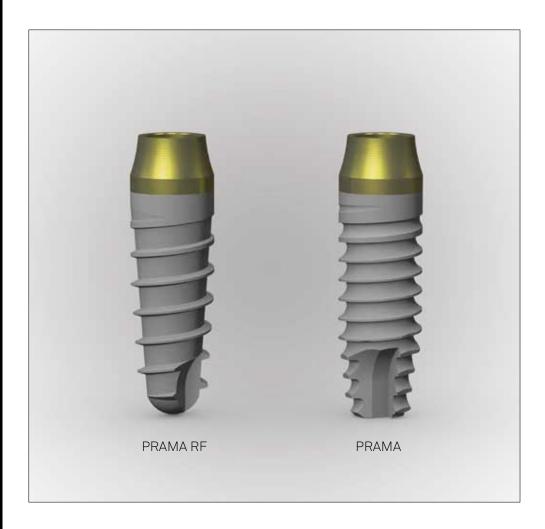
The cylindrical morphology of the Prama implant, with 15 years of clinical experience, allows to take advantage of the implant design according to the site and the most appropriate use.

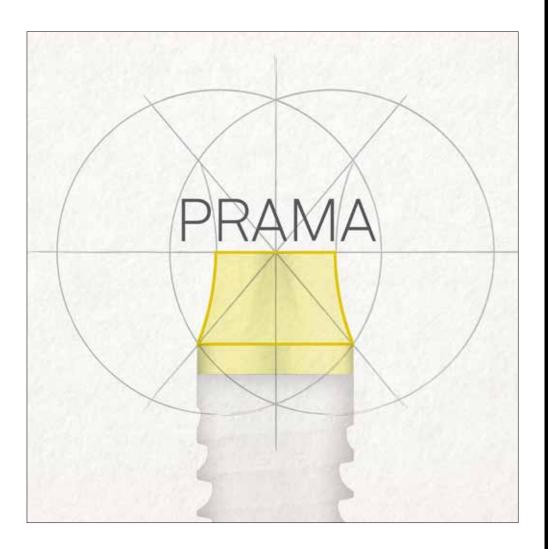
In particular, the cylindrical body **facilitates the insertion in the mandibular bone**, which is often poorly vascularised and highly corticalised. Moreover it guarantees the maximum surface of bone-to-implant contact, for the benefit of the BIC (Bone-to-Implant Contact) percentage which can be obtained.

Prama RF (Root Form) has a tapered morphology, and it is **recommended** for the insertion in a poorly mineralized bone, where the RF implant reaches the maximum stability.

The markedly rounded apex of this implant makes it safe and reliable also in the cases of maxillary sinus elevation.

The endosseous body of the implant has the typical sand-blasted and acidetched ZirTi surface, and the degree of roughness can remarkably increase the bone to implant contact area, thus promoting osseointegration.





The Prama neck

The Prama transgingival neck is characterized by a cylindrical 0.80 mm part and a hyperbolic 2.00 mm portion designed to guarantee a continuous profile with the post.

This absence of sharp edges allows soft tissues to adhere on the titanium without finding obstacles and to reach the profile established by the prosthodontist. Moreover, it will facilitate the positioning of the prosthetic crown in any part of the transgingival section.

The Prama neck is characterized by the **UTM** (**Ultrathin Threaded Microsurface**) morphology, that prevents plaque accumulation on the connection with the post; moreover, the particular roughness of the UTM neck allows a great adherence of the connective fibres.

The colour which characterizes the transgingival section allows a **natural mimetic effect** of the metal under soft tissues and under the new aesthetic materials used in implant-prosthesis.

The Collex connection

Prama implants are available in 3 sizes, **3.80 mm, 4.25 mm and 5.00 mm; all of them have the same 3.40 mm connection**.

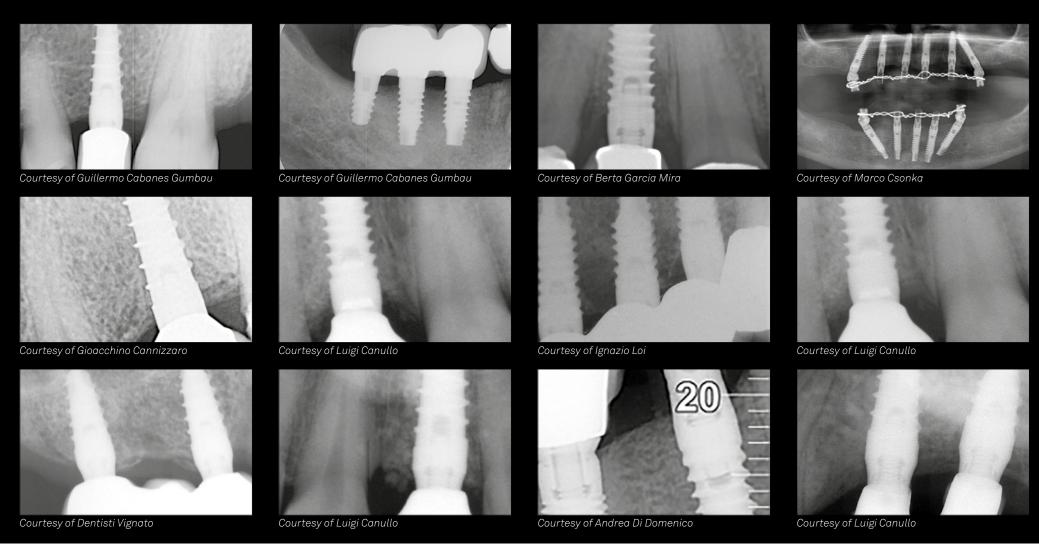
The available lengths range between 6.00 mm and 15.00 mm.

The Prama system is characterized by **the Collex connection**: the presence of a prosthetic support collar, positioned in the inner part of the connection, guarantees **a great prosthetic stability. Implants are placed with the patented Easy Insert drivers**, which allow good intraoperatory view and grant an easy and safe mountless insertion procedure.

The **internal hexagon** means high prosthetic stability and lends the prosthetic structure a great resistance against masticatory loadings.



LOOK AT THE EFFECT ON HARD TISSUES!





LOOK AT THE EFFECT ON SOFT TISSUES!

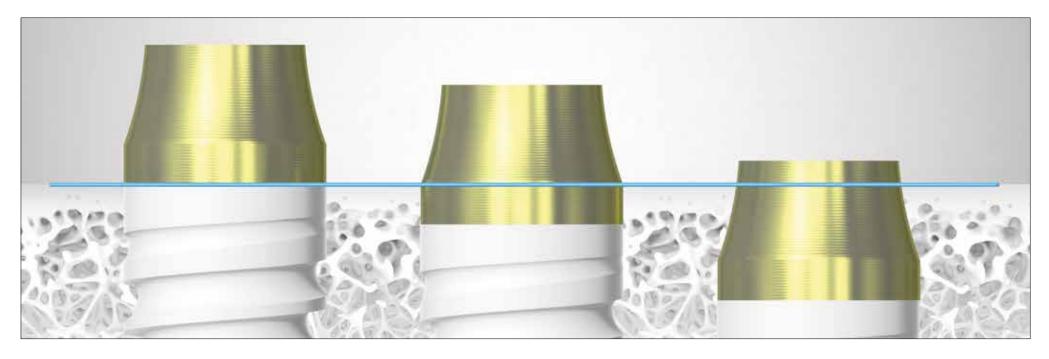




NOT ONLY TRANSGINGIVAL

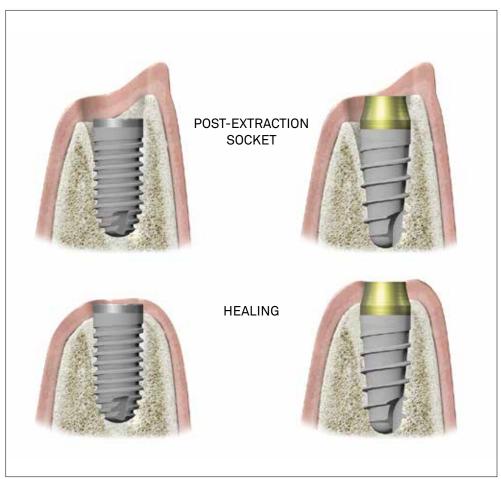
The morphology of the Prama neck has been defined as hyperbolic since the beginning due to the characteristic curvature that distinguishes it. This feature increases its capability, already inherent in the convergent shape, of **adapting three-dimensionally to asymmetrical crests**, with no need for augmentation or resective surgery. Moreover, the UTM surface on the neck has proven to be an excellent substrate also for osteoblasts, which attach on it and organize themselves over time. Thereby it is possible to place a Prama implant either transgingival or submerged, depending on clinical requirements.

The Prama range also includes **implants with reduced height (6.00 mm)**, giving this system a great surgical versatility and allowing the clinician to manage the insertion level according to the type of bone and to the anatomical structure.





ASYMMETRIC CREST? TAKE ADVANTAGE OF IT!



neck facilitates the maintenance of thick and healthy tissues.

The truncated hyperbolic cone shape allows to preserve all the circumferential

The clinical experience has shown that in immediate post-extraction procedures it is possible to **preserve the bone peaks of the alveoli** because the convergent

bone and to leave space for the clot, while the UTM (Ultrathin Threaded Microsurface) treatment of the neck allows an optimal stabilization and organization of the fibres, which accelerates the healing process.

All these aspects contribute to the **natural regeneration of the circumferential bone** despite initial deficit, showing that the surgical and morphological peculiarities of Prama implants play a primary role reaching the excellent biological and aesthetic results to which Prama users have become accustomed.

Bone-level implant

Prama implant



IF THE THREADS ARE NOT EXPOSED, WHY SHOULD YOU REGENERATE?

BONE LEVEL IMPLANTS





Simulation on pig's mandible with bone level implants Courtesy of Marco Csonka



Read more on this topic on our website

PRAMA IMPLANTS





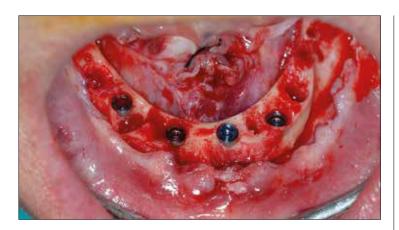
Simulation on pig's mandible with Prama implants Courtesy of Marco Csonka

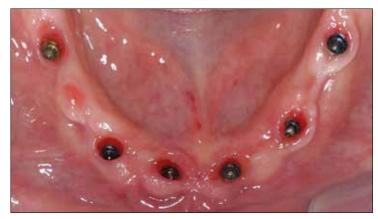
Inserting an implant in **thin crests** can be difficult, especially when the endosseous threads naturally emerge from the volumen of the receiving bone. In these cases it is usually necessary to graft to cover the exposed threads, then the site is protected with membranes and sutured to allow primary intention healing.

Prama implants, for the particular morphology of their necks, can be placed deepen, submerging the whole treated surface, thus placing the threads entirely into the bone, where there is a suitable thickness to cover them: the convergent portion of the neck will fit different bone anatomies, allowing more space to soft tissues, in a single surgical procedure.

LEVELLING THE BONE CREST OR PRESERVING BONE PEAKS?

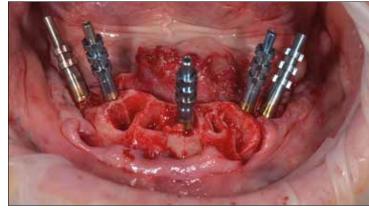
BONE LEVEL IMPLANTS





The osteotomy generate a contraction of tissues volumes in the end Courtesy of Dentisti Vignato

PRAMA IMPLANTS



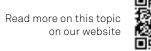


Bone peaks preservation helps maintaining bone and soft tissues volumes supporting the prosthetic rehabilitation Courtesy of Dentisti Vignato

In post-extraction procedures with

Prama implants, clinical experience has shown that it is possible to preserve bone peaks between alveoli, since the convergent neck does not interfere with the correct positioning of the rough portion inside the bone crest and at the same time it leaves room for the clot, facilitating the maintenance of thick and healthy tissues.

Therefore why sacrifice bone when it can be a resource?



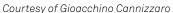
IDEAL FOR FLAPLESS PROTOCOLS



The hyperbolic convergent neck is suitable for **totally flapless protocols**, avoiding mucotomy, even in cases of limited adhering gingiva. In fact the clot within the circumferential gap **will rapidly restore a thick and stable connective tissue**.

As a further advantage, Prama implants can be placed transgingivally or in a deeper position according to the height of the attached gingiva, without the traditional limits of common implant platforms, which normally present square edges.









THE MARGIN WHERE YOU WANT IT, AT 360°



Rehabilitations on Prama implants take advantage of the total absence of margins or prosthetic chamfers and the vertical morphology of the post guarantees continuity with the neck of the implant.

This absence of margins allows the soft tissues to flow on the titanium surface without obstacles and to obtain the desired adaptation profile set by the prosthodontist.

Furthermore the prosthodontist can place **the prosthetic crown margin at any level of the transgingival portion**, thus managing the different anatomical and/or clinical situations of the patient.









SCREW RETAINED OR CEMENTED? THE RESULT IS THE SAME

Prama was born from the principles of B.O.P.T. technique on natural teeth and it represents its implant-prosthetic evolution.

The emergence profile recreated on the prosthesis is one of the key-factors to take advantage of the potentiality offered by Prama, and the benefits of this profile on soft tissues are evident both in case of cementation of the prosthesis and screw retaining. The opportunity to position the margin of the prosthesis at different levels of the transgingival portion, regardless of the prosthetic procedure chosen, allows the clinician **maximum freedom in the management of the soft tissues**.

Depending on the protocol adopted and the positioning of the implant, it is possible to choose between standard prosthetic solutions, laying on the platform connection, and specific implant neck embracing post.



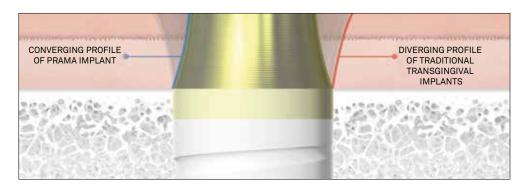


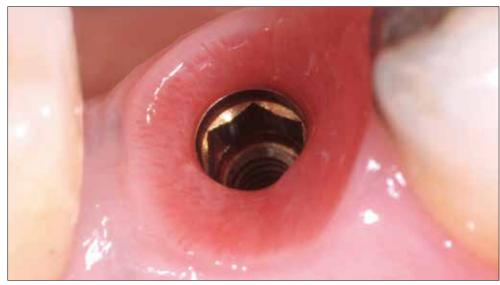


Courtesy of Andrea Di Domenico



MORE SPACE FOR SOFT TISSUES





Courtesy of Andrea Di Domenico

The converging morphology of the Prama neck allows to thicken soft tissue portion in the area that a traditional transgingival implant would fill with titanium.

The convergence of the Prama implant neck makes it possible for the clot to fill the coronal periimplant portion. The clot is rich in important growth factors, which transform themselves into thick and functional soft tissues.

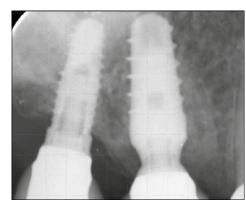
The thickening of the gingiva around the Prama neck represents an undoubted benefit, especially in patients with a thinner biotype, in which a favourable management of soft tissues and the possible different positioning of the implant enables **excellent aesthetic results**.



HORIZONTAL AND VERTICAL PLATFORM SWITCHING



Courtesy of Fabio Gorni



Courtesy of Dentisti Vignato

For many years scientific literature has been dealing with the concept of **Platform Switching**, the restorative prosthetic technique involving the use of posts with a smaller diameter than the implant platform with the aim of improving the biomechanical distribution of the prosthetic loading, and mainly to plan the prosthetic connection at a distance from the cervical bone, thus moving away from the bone the critical point of bacterial infiltration from bone.

From this experience, the idea of maximizing the Platform Switching mismatching with Prama implants was developed, **taking advantage of both its vertical and its horizontal dimensions.** Another great benefit of the shape of the Prama implant neck is the possibility to include the implant-post interface inside the crown, thus **protecting the connection from bacterial infiltration** and avoiding the risk of peri-implant infections.

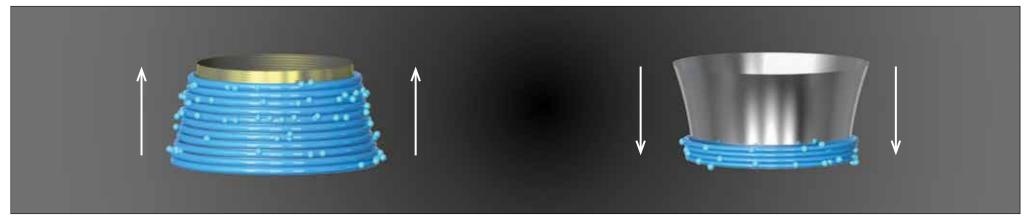


CONNECTIVE TISSUE CORONAL MIGRATION

The morphology of the part of the implant-prosthetic assembly which comes in direct contact with soft tissues plays an extremely important role in the quality of healing. The contraction of myofibroblasts and collagen fibres entails a migration of the tissues towards the narrowest diameter, so the converging morphology of the Prama neck allows a growth of the soft tissues towards the most coronal portion, which will stabilize and support the healing and the consequent maintenance and coronal growth also of hard tissues.

Finding a situation favourable to its regeneration, the connective tissue will progressively thicken thereby creating around the neck of the Prama implant a **high and** vascularized transgingival area thus the connective tissue, besides its function of bone support, will also contribute to obtain an excellent aesthetic result and will allow a healthy and natural look.

Also around traditional divergent neck transgingival implants the fibres migrate towards the narrowest diameter, but in this case it means they shift in apical direction, considerably limiting the soft tissues regenerating process.

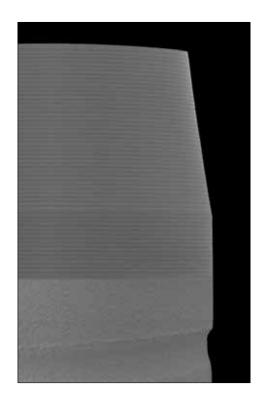


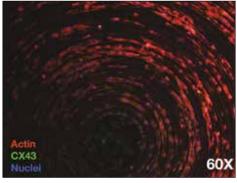
Prama implant Transgingival implant

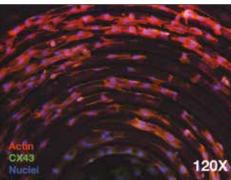


THE UTM SURFACE TREATMENT OF THE NECK

(Ultrathin Threaded Microsurface)







SEM (Scanning Electron Microscope) image of the UTM neck. Arrangement of murine myofibroblasts on

the UTM surface after 72 hours and observed with fluorescence microscopy - in vitro study. Thanks to the kind concession of the Dentistry Department of the University of Parma.

Implant surfaces not only are the substrate with which the biological structures interact after the insertion of the fixture, but also activate the signals that cause a different response in terms of proliferation and cellular organization. This concept, very much discussedr in the literature as regards hard tissues, is now considered important also for soft tissues.

With these premises, Sweden & Martina has developed the **UTM** (**Ultrathin Threaded Microsurface**) **treatment**: a microthread that runs all along the neck of the implant and that offers a guide to the unidirectional fibroblast movement for all the length of the transgingival portion. The biological benefit consists in a **rapid cellular activity with low energy consumption**, and the clinical benefit, really impressive when using Prama implants, is the **acceleration of the healing process and the long term preservation of stable and healthy tissues**.



TRY AND PROBE!



Courtesy of Guillermo Cabanes Gumbau

Collagen fibres migrate towards the narrower part of the converging neck.

The convergent morphology of the neck of Prama implants allows an excellent adhesion of the collagen fibres with a resulting coronal migration of the connective tissue.

In this **rearrangement of the peri-implant soft tissues** the morphology of the prosthesis also plays a key role. The prosthetic restoration is indeed fabricated according to the principles of the B.O.P.T techniques: it presents a characteristic emergence profile around which the soft tissues grow and adjust over time.

The benefits brought by the convergence of the neck, associated with those of the B.O.P.T. protocol, allow an **effective seal at the prosthetic sulcus**: this results in a **short and horizontal probing of the sulcus**, that leads to a high aesthetic value with stable and functional tissues.



DO YOU SEE IT UNDER SOFT TISSUES?



Courtesy of Andrea Di Domenico

The Prama implant **transgingival neck** undergoes an anodic passivation process that gives it the characteristic golden pale yellow colour, so that it is **mimetic under the soft tissues also when the patient's biotype is thin**.

The pre-made post also undergoes the same treatment, so as to create continuity between implant and prosthesis.

But does the anodizing process produce any reaction in the tissues it comes into contact with?

Some tests recently carried out at the University of Padua confirm that **anodized titanium does not increase the accumulation of bacterial plaque not only when compared with non-anodized, but also compared with zirconia**. Moreover the results show that cleaning with low-concentration chlorhexidine can limit bacterial adhesion and proliferation.

Sbricoli L, Paniz G, Abate D, Saldan A, Palù G, Bressan E. Influence of abutment material and detersion protocol on bacterial adhesion: An in vitro study. J Oral Science Rehabilitation. 2018 Mar;4(1):32-36.



Read more on this topic

IDEAL FOR B.O.P.T. TECHNIQUE



Courtesy of Ignazio Loi

The Prama implant design was developed from the concept of the B.O.P.T. technique on natural teeth, and it takes advantage of the same principles to obtain stable and aesthetic rehabilitations.

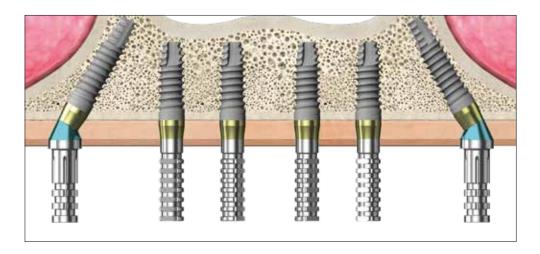
The capability of soft tissues to adapt to the shapes of the prosthetic structures is enhanced by the Prama neck that, connected to posts with a vertical geometry, allows the prosthetic emergence profile to shape the peri-implant tissues.

With Prama, the "biologically oriented preparation technique" becomes a "prosthetically oriented preparation technique", which benefits from the vertical geometry, allows **free space for the regeneration of tissues around the prosthetic emergence** and also distances the bacteria's operating zone from the bone crest.

The result is a **mucosal sealing around the neck of the implant after just 24 hours** and a healthy look of soft tissues, which start healing immediately after surgery.

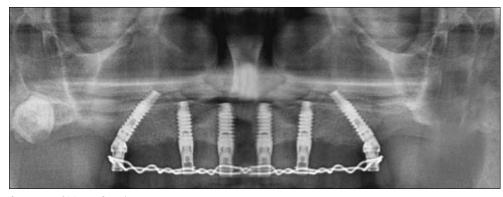


ALL ON PRAMA



When a completely edentulous arch is restored with traditional submerged implants it is necessary to use intermediate abutments like P.A.D. both on the angled distal implants and on the straight mesial implants. Moreover the distal margin of the angled implants has to be submerged, with a resulting crestal bone loss and with difficulties due to the very deep position of the implant connection.

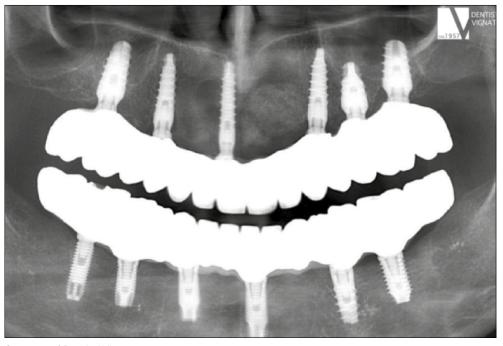
However, by using transgingival Prama implants it is possible to **avoid the use intermediate abutments in the frontal sector**, positioning only the preangled ones on the distal implants. Moreover the conformation of the convergent neck allows to position the distal margin of the tilted implants at crestal level and the mesial margin at transgingival level, **avoiding the need to use a bone profiler.**



Courtesy of Marco Csonka



DIRECT TORONTO BRIDGES ON IMPLANTS



Courtesy of Dentisti Vignato

There are at least three reasons to consider Prama implants as a more effective tool for complex rehabilitations of a dental arch.

- 1. The respect of crestal bone anatomy
- 2. The conical emergence adaptation to bone irregularities
- 3. No need to use intermediate angled abutments

This means a minimally invasive surgery, faster healing and still there is the possibility to insert the implants in an angled position.

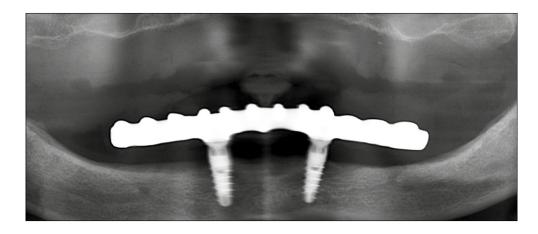
The rehabilitation of a dental arch on Prama implants allows the clinician to set the prosthetic structure at a distance of at least 2.80 mm from the osseointegration area, thereby forming a gingival protection area and a soft tissue support capable of guaranteeing easy cleaning and aesthetic stability over time.

Moreover, combining the gingival healing potential of the neck converging shape with the use of modern connective membranes, it is now possible to fabricate prostheses which are 'ALL WHITE' or with a minimal share of pink, without excessively invasive operations.

Drs Giuseppe and Costantino Vignato, Vicenza



IT IS SOLID!





Courtesy of Gioacchino Cannizzaro

A study coordinated by dr. Cannizzaro has compared the result after one year of immediate loading rehabilitations of a complete arch on Prama implants in the maxilla and in the mandible.

40 patients have been recruited for the study, divided into two homogeneous groups, both composed of 20 patients, 10 with total edentulism in the maxilla and 10 in the mandible. The first group were treated with a total rehabilitation on 3 implants (Fixed-on-3 or Fo3), while two implants were inserted in the patients of the second group (Fixed-on-2 or Fo2). In both cases the clinicians have estabilished an insertion with a minimum torque of 60 Ncm, so as to guarantee an excellent primary stability.

At the end of the observation period no implant failure was registered, nor were fractures or diseases been noticed in the peri-implant area.

In this research **Prama implants, thanks to the Collex connection and to the design of the convergent neck**, proved to be suitable to support rehabilitations with a Fo2 and Fo3 protocol in patients eligible for such treatments, **with a reduced number of implants**.

Cannizzaro G., Loi I., Viola P., Ferri V., Leone M., Trullenque-Eriksson A., Esposito M. Immediate loading of two (Fixed-on-2) versus three (Fixed-on-3) implants placed flapless supporting cross-arch fixed prostheses: one-year results from a randomised controlled trial Eur J Oral Implantol 2017;10(3):279-291



BE UNIQUE. BE PRAMA.





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