DESS

Clinical case

All-on-4 DESS® Conical BLT implants and new generation of Multiunits: MUA+

Dr. Iñaki Mayo presents a surgery of 4 implants on the mandible and the new MUA+ Multiunits with anatomical profile and Periocoat ® treatment.

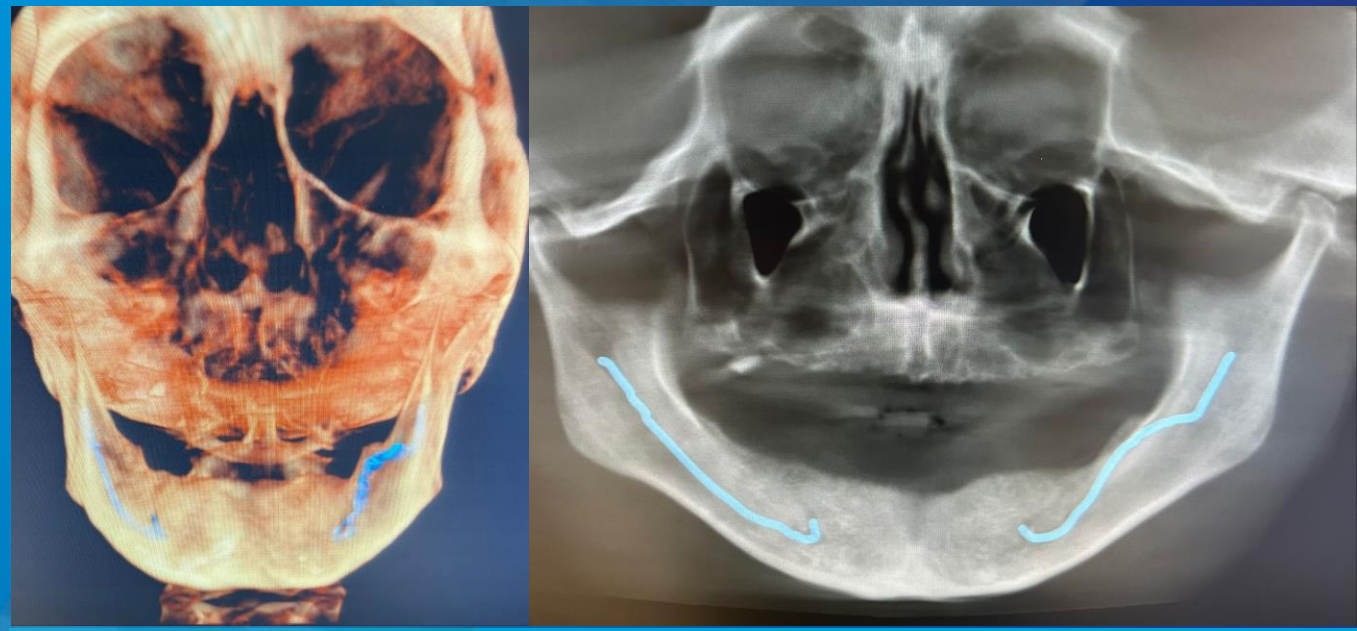
Dr. Iñaki Mayo
Barcelona (Spain)

CASE PRESENTATION

Edentulous patient in the upper and lower jaw, with removable prostheses for many years, came to the dental office looking for an implant treatment in the mandible in order to achieve greater fixation and stability with a fixed screw-retained Full Arch.

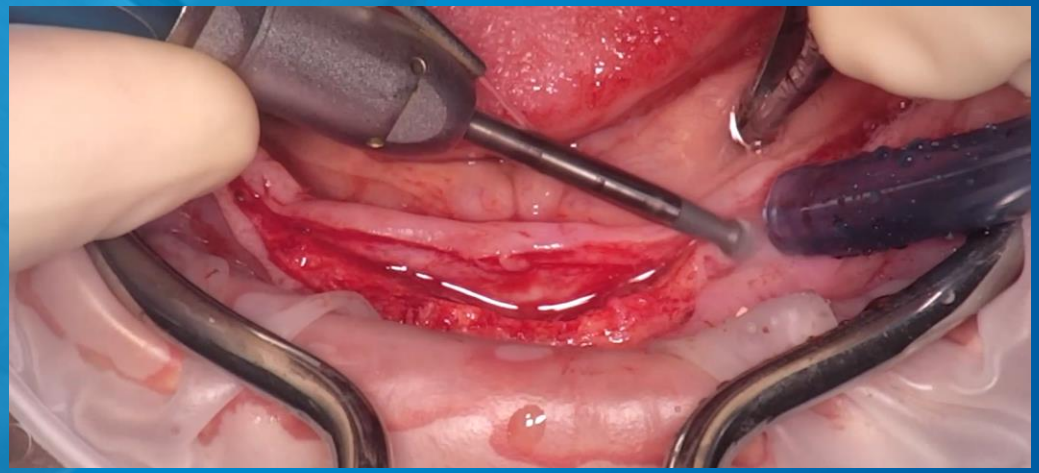
It is proceeded to perform an All-on-4 with the placement of four DESS® Conical BLT implants of 4.1 x 12mm and Multiunits MUA+ abutments where the prosthesis will be screwed.

With the images of the previous CBCT for the study of the case, it is observed that due to the location of the mandibular nerve, the placement of the implants will be on the pieces 35-32-42-45



Initial Situation

Dr. Mayo begins the surgery by making an incision over the soft tissue to access the bone and with the aid of a ball drill prepares the bone prior to beginning the milling protocol.

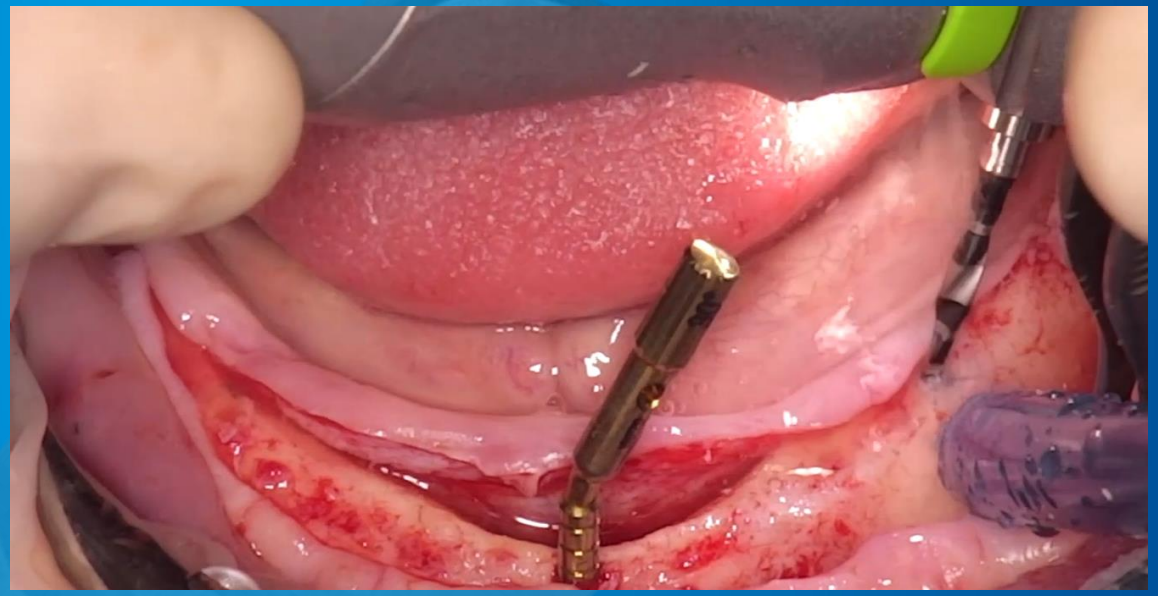


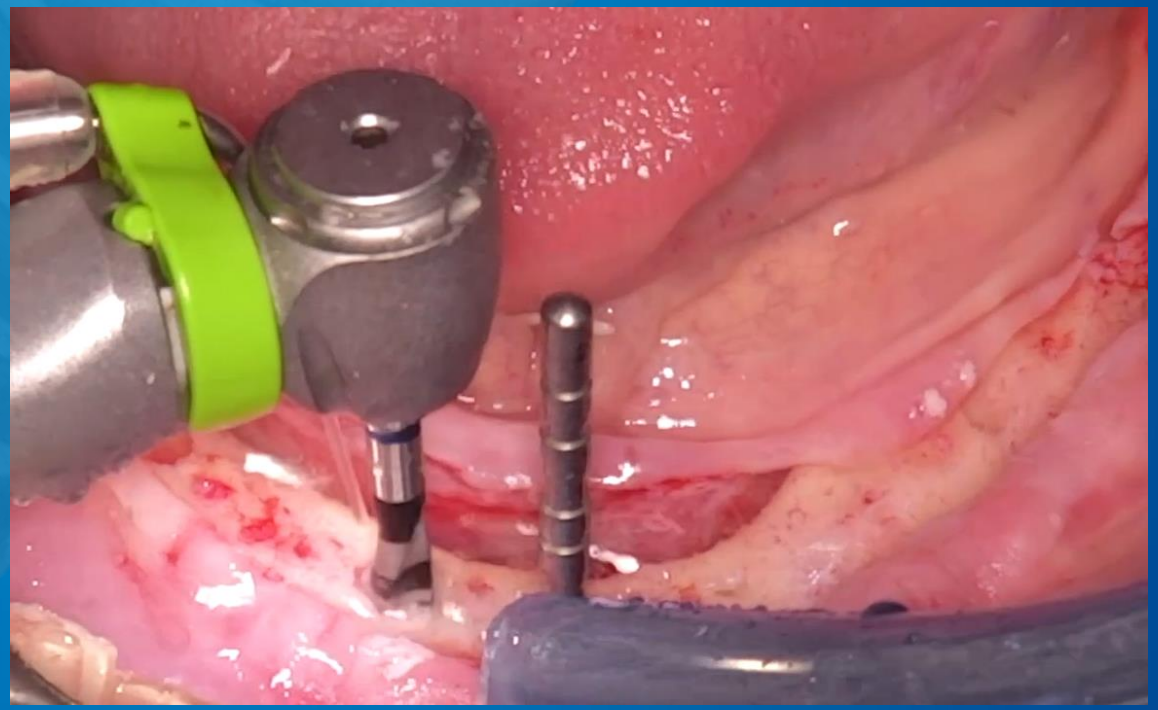
Milling protocol

The milling protocol and sequence of surgical drills to be used with the DESS® Conical BLT implants is indicated in the IFU downloaded from the QR in implant boxes, catalog, as well as in the Conical BLT surgical protocol video available at www.dessdental.com

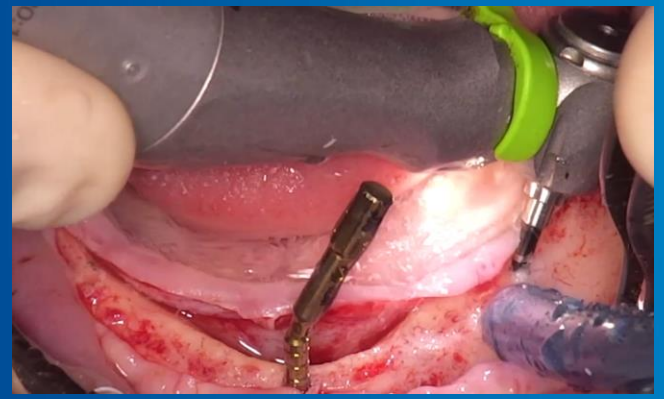
In order to place the two posterior implants in the desired angulation in an All-on-4 following the guidelines of its creator Dr. Paolo Maló, Dr. Mayo places a guidepost at the level of the inferior midline that will mark the angulation of the drilling at 35 and 45.

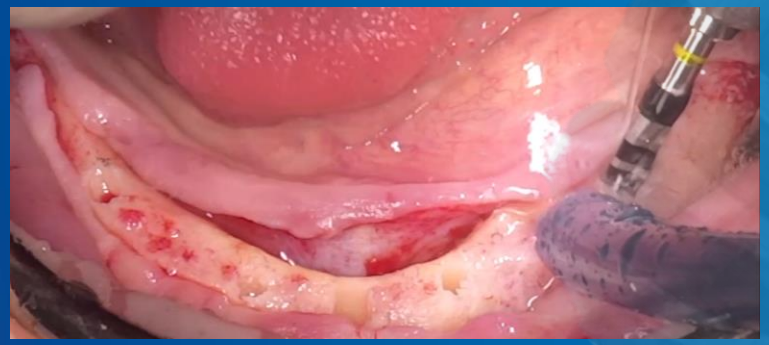
In the same way, for the placement of the two anterior implants, the Doctor uses one of the parallelizers included in the DESS® Conical BLT surgical kit to reference the drilling and obtain a parallelism between the implants in position 32 and 42.





Milling protocol

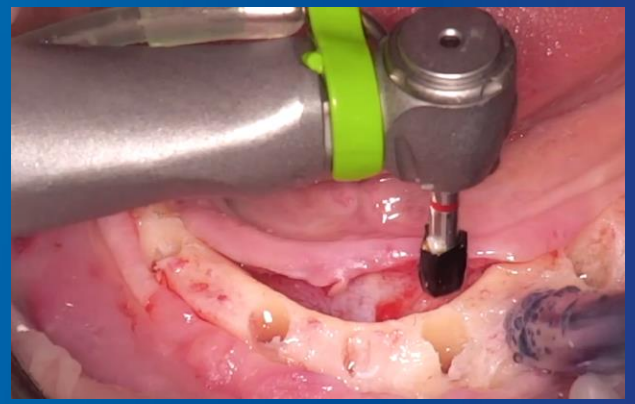


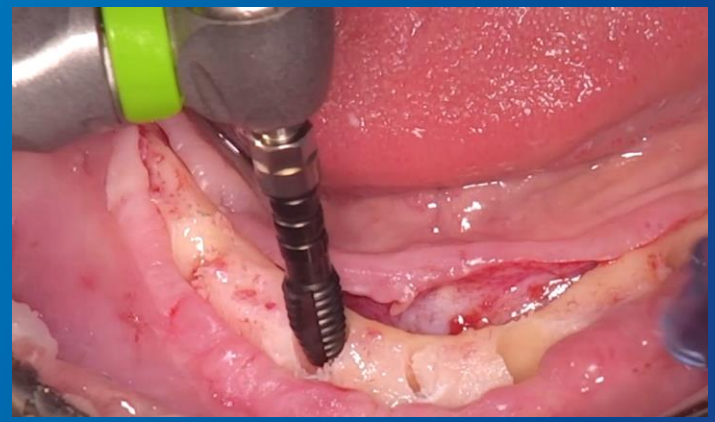


It is very important to follow the drilling sequence indicated for each implant diameter as well as for the patient's bone type, using the appropriate drills.

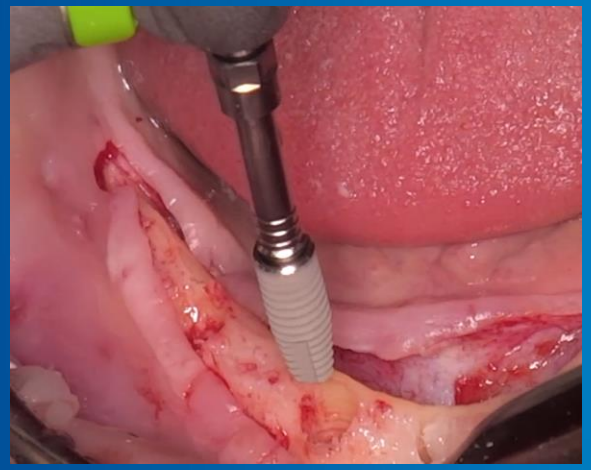
Therefore, once the last drill is used determining the diameter of the implant, the use of the drill profile on the cortical bone, especially when it is thick, will avoid over-compression in this area of the implant.

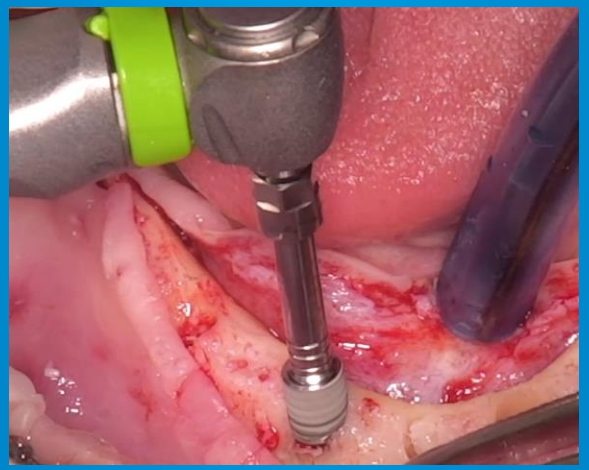
Finally, in cases of Type I and Type II bone, the use of the screw tap will help to place the implant without the need to apply a higher torque than recommended, preserving the implant connection and avoiding overheating of the bone.

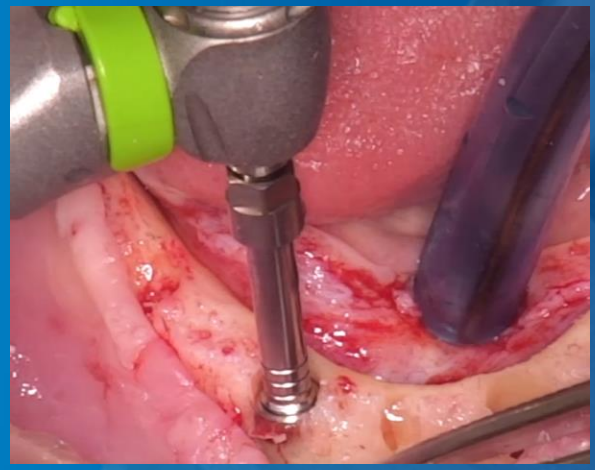




Implant placement

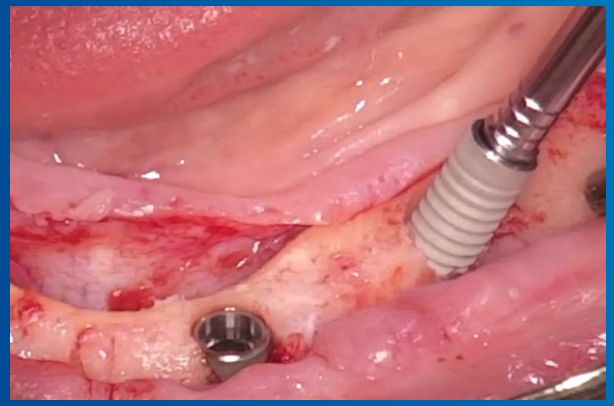


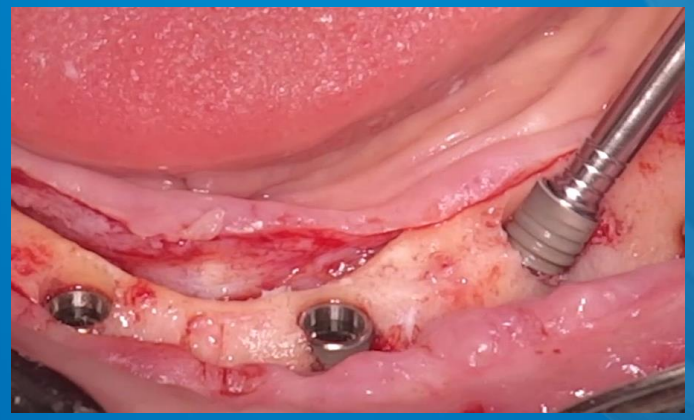


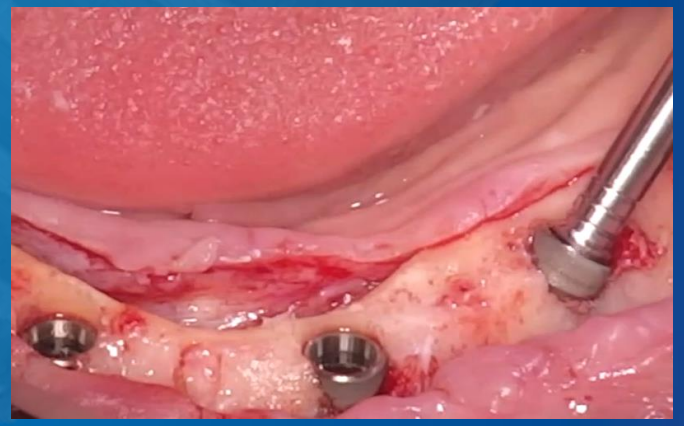


Once the drilling protocol has been completed, it is time to place the implants at 35Ncm by connecting the driver to the implant.

If necessary, the DESS® Conical BLT surgical kit offers the possibility to use the adapter together with the special tool by connecting it to the torque wrench for manual positioning and final placement.







CONICAL BLT® IMPLANT

DESS ref. INBLXXXXXXX

TECHNICAL INFORMATION

- Cold worked Titanium Grade IV
- Same implant platforms and lenghts as Straumann® Bone Level®.
- Internal cross connection
- OST by DESS® (Osseointegration Surface Technology) - acid etch and sandblasting treatment. Complies with SLA standards.
- Bone level tapered implant design
- Esterilised by radiation
- CE: Class IIb
- FDA: Class II

FEATURES

- Pure Switch® concept
- Dual function connection: internal conical at 15º with 4 internal grooves that improve stability
- Packaging: PET blister, titanium vial and cardboard box
- Tapered apical and self-cutting design

CLINICAL BENEFITS

- The tapered apical threads and self-cutting design are ideal for soft bone or very soft bone.
- The bone level tapered implant design allows for maximised crestal bone preservation and microgap control.
- All the features combined together provide excellent primary stability.
- Pure Switch®: The implant can be placed with DESS® Surgical Kit or Straumann® Bone Level® Surgical Kit [1] and protocol.
- Cold worked Titanium Grade IV for superior mechanical resistance.

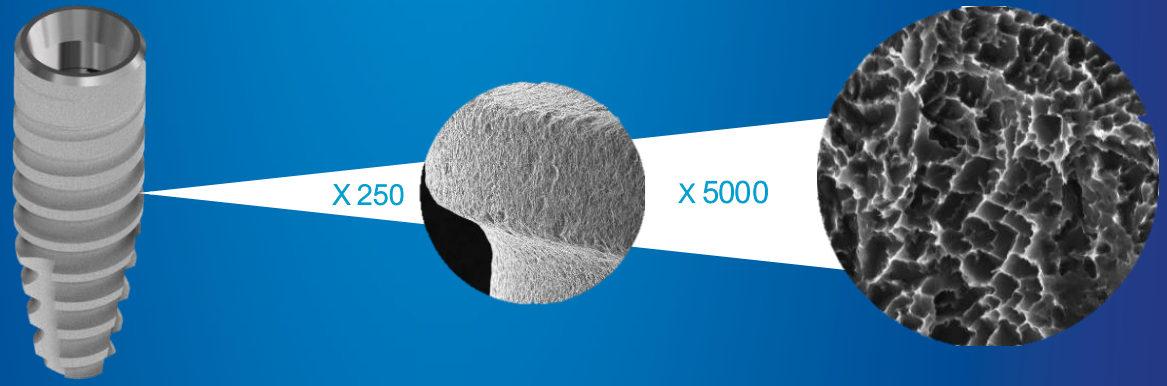
BUSINESS BENEFITS

- Pure Switch®: Lower investment by using Straumann® Bone Level® tools with Conical BLT® implant.
- Zero Waste - consists in recycling and reusing 100% of it's packaging. For every 10 empty packs returned, DESS provides 1 free implant.

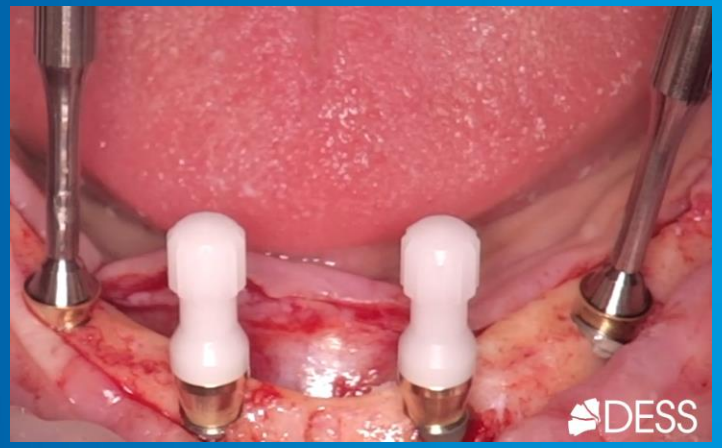
[1] It's necessary to buy DESS® implant drivers for each platform and adaptor DTSTTR.

DESS® Conical BLT implant

OSSEOINTEGRATION SURFACE TECH OST by DESS®



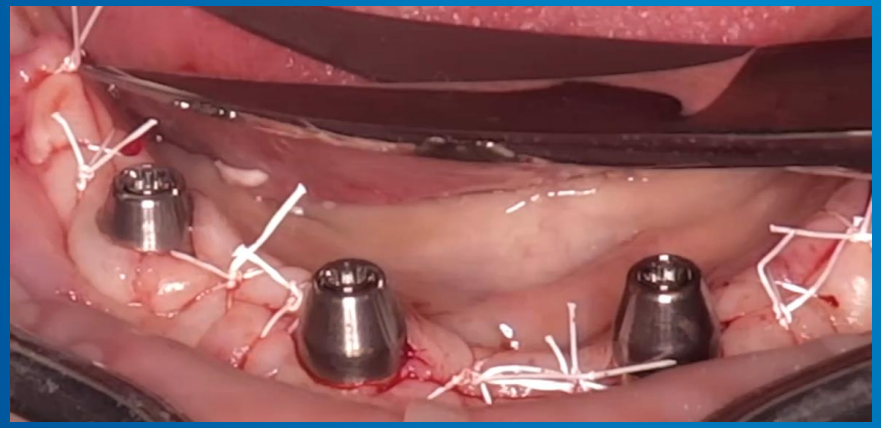
MUA+ Placement



The new MUA+ Multiunits were placed over the DESS® Conical BLT implants with our patented Periocoat® (ZrN) treatment, which prevents bacterial plaque adhesion and gingival inflammation, in addition to a smoother anatomical profile and a much more natural gingival transition.

In this case, two straight MUA+ were placed on the anterior implants and two angulated 30º MUA+ on the two posterior implants.
All the MUA+, like our standard MUA, include carriers to facilitate their placement in the patient's mouth.

Final control X-Ray was performed, measurements were taken to make the provisional, healing abutments screwed on the MUA+ and the final suture was made.



Periocoat® Surface ZrN Treatment Patented by DESS®

Less Plaque Adhesion

Reduces bacterial build-up, maintaining cleaner prostheses.

Less Inflammation

Promotes healthier tissue integration, reducing complications over time

Helps Prevent Peri-implantitis

A safeguard for implant longevity by minimising infection risks.

Corrosion Resistant

Provides lasting durability, ensuring the integrity of the restoration.

Facilitates Hygiene

Smooth surfaces help patients maintain daily oral hygiene with ease.

6x Harder than Titanium Oxide

Increases surface strength, elevating the overall quality and lifespan of the implant.

MUA+ by DESS®

Acknowledgements

Dr. Iñaki Mayo
Barcelona

- **Dentistry Degree.** Universitat Internacional de Catalunya (UIC)
- **Master in Oral Prosthesis and TMJ.** Universitat Internacional de Catalunya (UIC)
- **Implant & Surgery Specialist.** Universidad de Sevilla
- **Diploma in Advanced Periodontics.** Universidad Complutense de Madrid
- **Diploma in Guided Tissue Regeneration.** Universidad Complutense de Madrid
- **International speaker and specialist in zygomatic implants.**
- **Medical Director of Dr. Mayo Dental Clinics**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DENTAL SMART SOLUTIONS