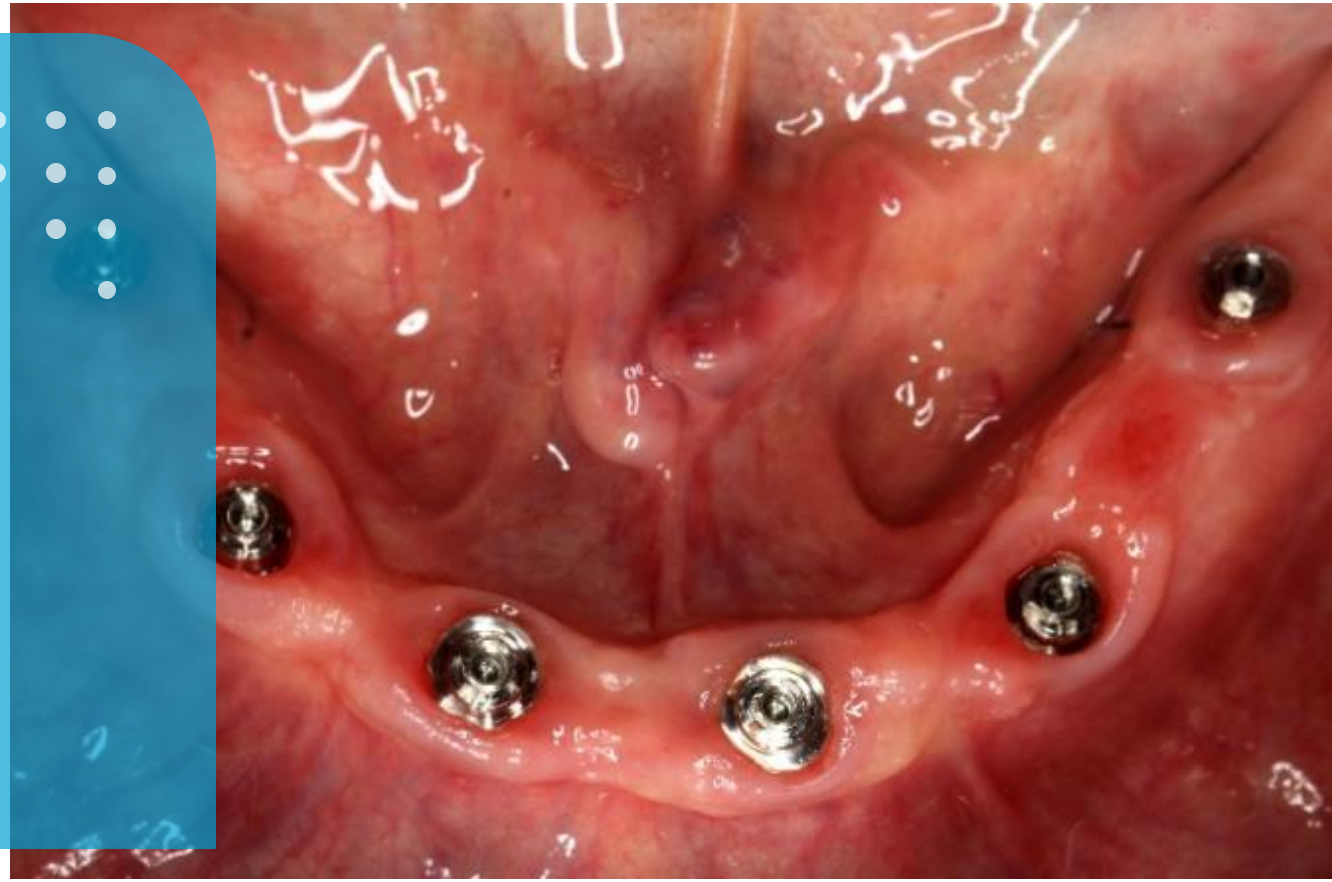
DESS

Clinical case

Multi-unit Abutments: Lower full arch restoration on DESS® Multiunits - Part II

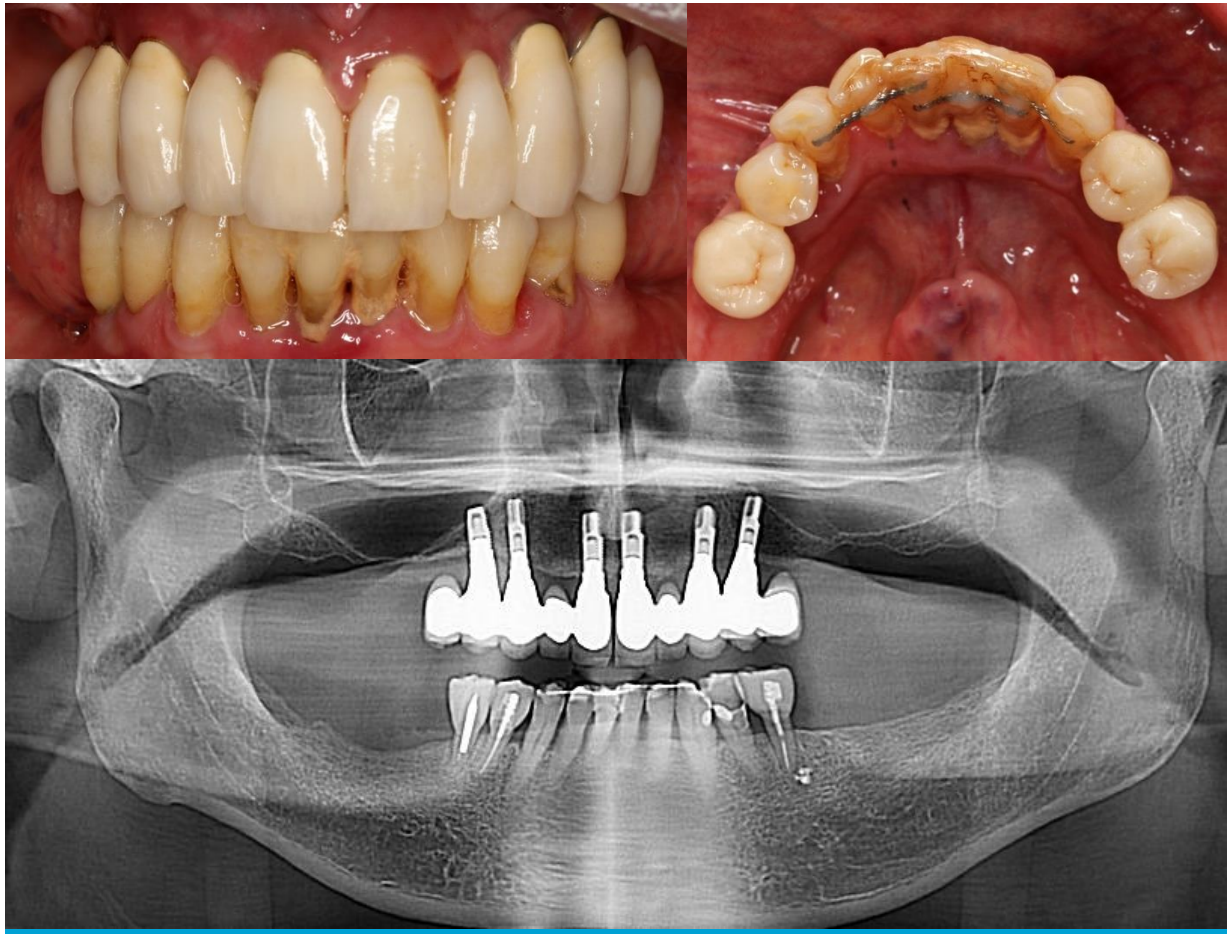
Doctor Steven A. Brisman presents a MUA case: final prosthetic restoration after implant osseointegration



Dr. Steven A. Brisman
United States (USA)

CASE PRESENTATION

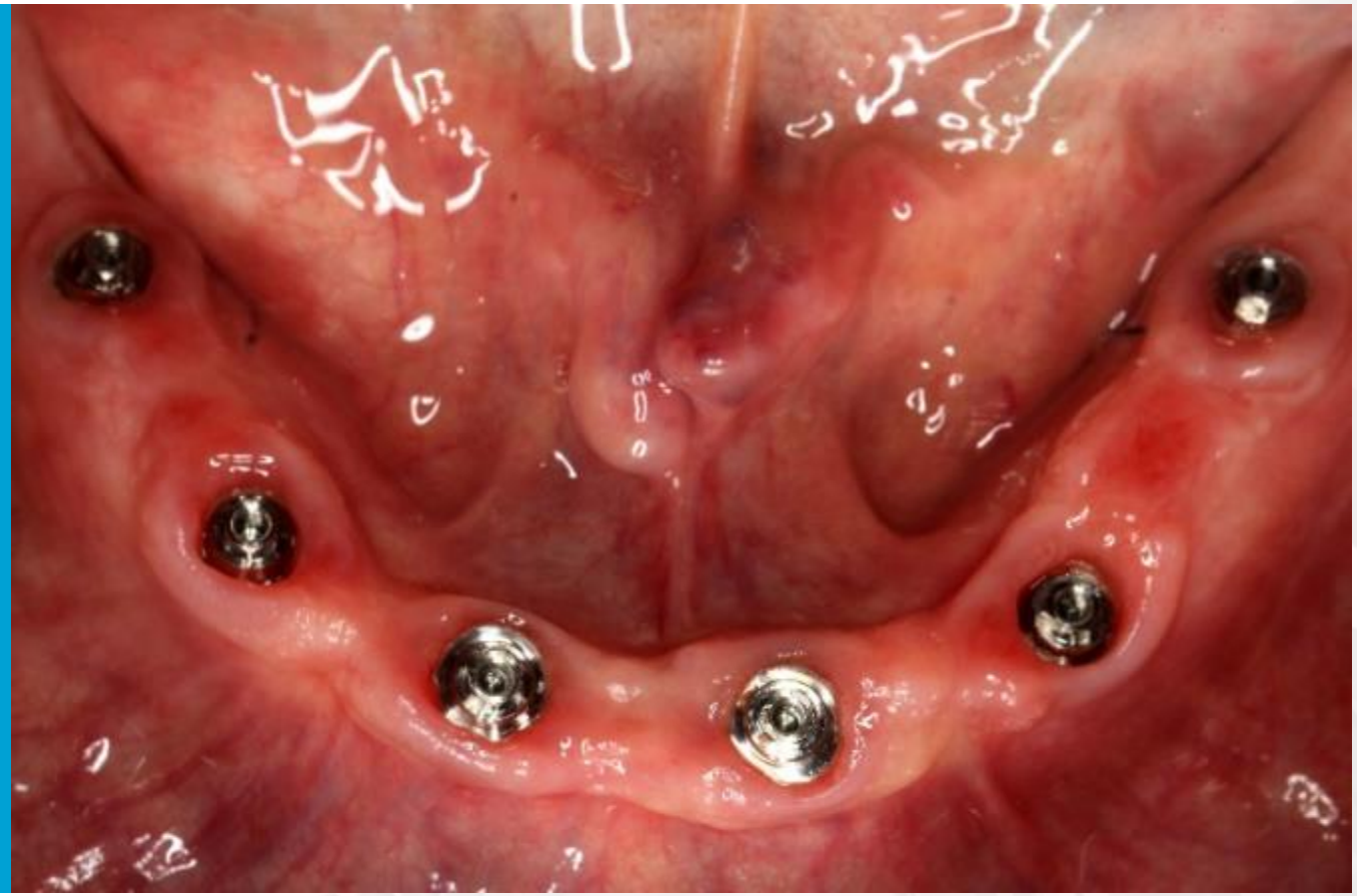
A 65-year-old patient presents to the dental clinic with chief concerns of loose lower teeth. Upon examination, the patient has a terminal or hopeless lower dentition opposed by a previously restored maxillary implant rehabilitation. Following radiographic analysis, including a CBCT, it was determined that the patient is a good candidate for an All-on-X restoration.

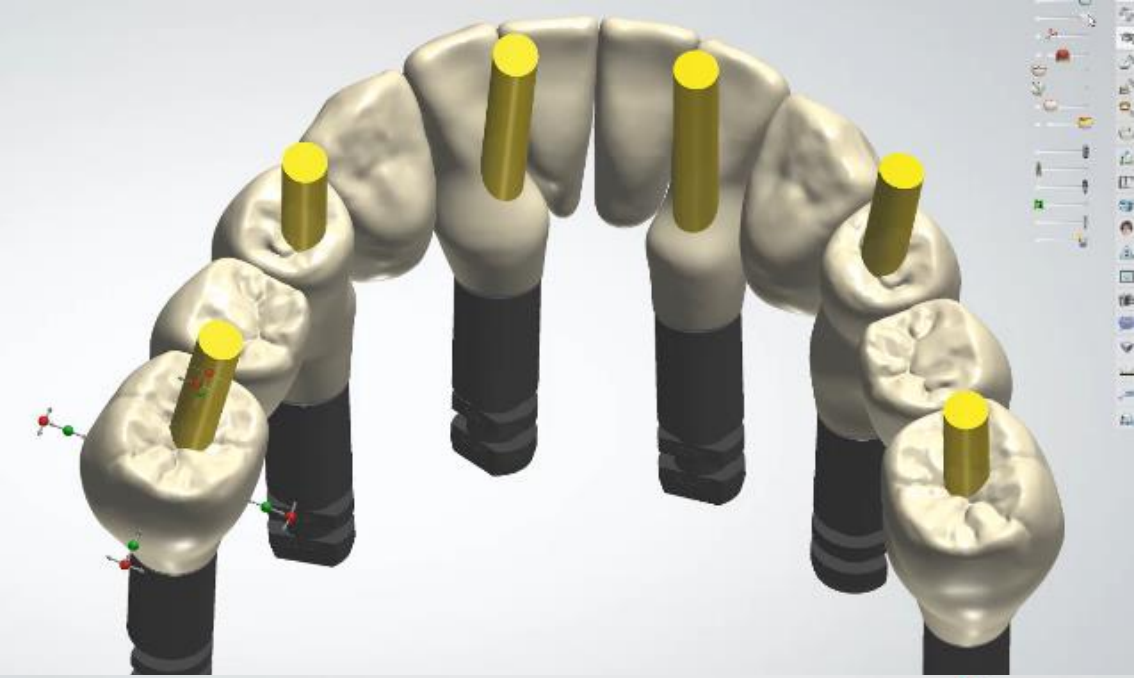


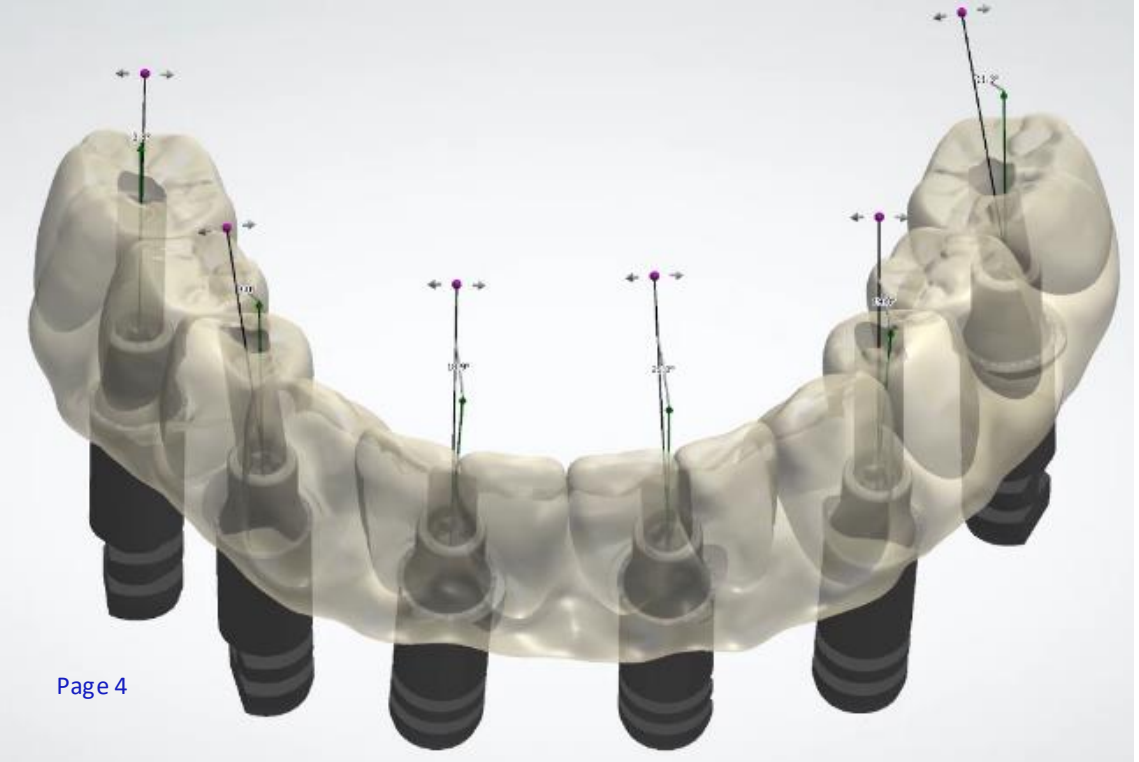
Initial situation

The **Multi-unit Abutment** remains a very popular protocol for implant-supported restorations.

The main advantage of this type of abutment is that the restoration is supragingival and screwed on first step to the implant and on the top of the abutment with a prosthetic screw (or second screw) that fixes the prosthesis to the **Multi-unit Abutment**.







These **Multi-unit Abutment** can be placed at time of restoration or at time of surgery. The original design, as developed by Branemark, was to have the standard abutment placed at the time of stage II surgery.

Today, it has become more common to place these intermediary abutments at the time of stage I surgery.

In addition to enhanced healing, the restorative clinician can provide the patient with an immediate provisional. It has been shown in the previous article from case #5 Part I that these provisional can be milled in the dental laboratory using **DESS® ANGLEBase®** channel componentry.

DESS Multi-Unit

TECHNICAL INFORMATION

- Titanium Grade V ELI 23
- DLC coated screws [1]
- Three versions: straight (non-engaging), 17° and 30° angulations (engaging)
- CE: Class IIb
- FDA: Class II

FEATURES

- Pure Switch® concept
- Same cone design for all DESS Multi-Unit, same shape as Nobel®
- Multiple gingival heights options: 1-5mm depending on the system
- Screw included - same screw design as OEM
- Placement carriers included for straight and angled versions*
- Fully shaped connection geometry
- Higher material strength and fully threaded areas
- Higher screwing torque up to 35Ncm [2]

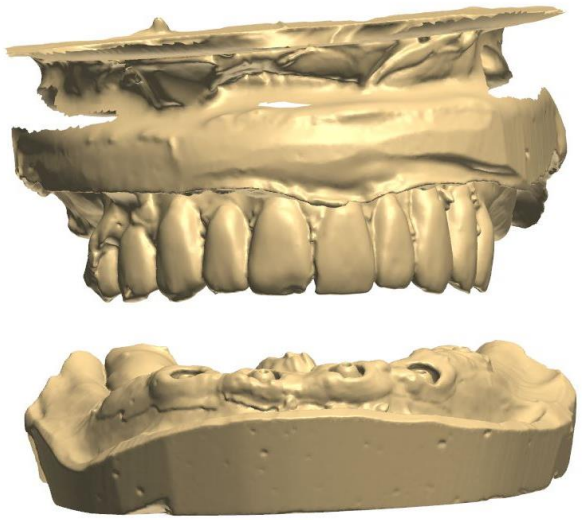
CLINICAL BENEFITS

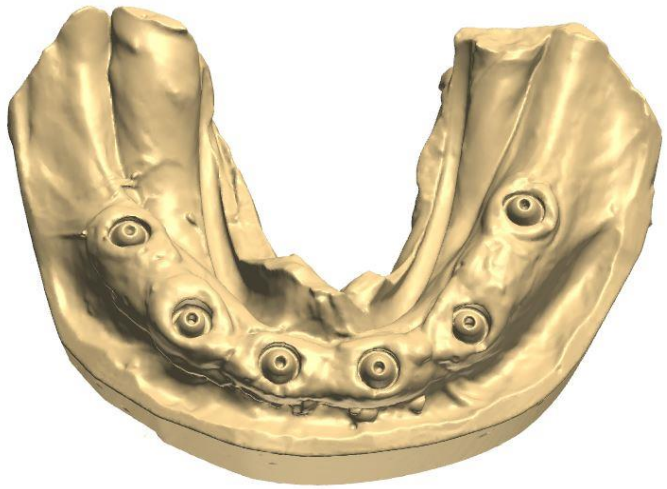
- Ideal for ALL-on-X: standardised prosthetic platform for screw-retained prosthetics
- Available prosthetic assortment for Multi-Unit
- The higher torque avoids screw loosening

Our patient (from case #5 Part I) returns following the normal healing and the provisional is examined and the healing is noted.

With the same **DESS®** screwdriver, the **Multi-unit** angulated screw set screws are removed.

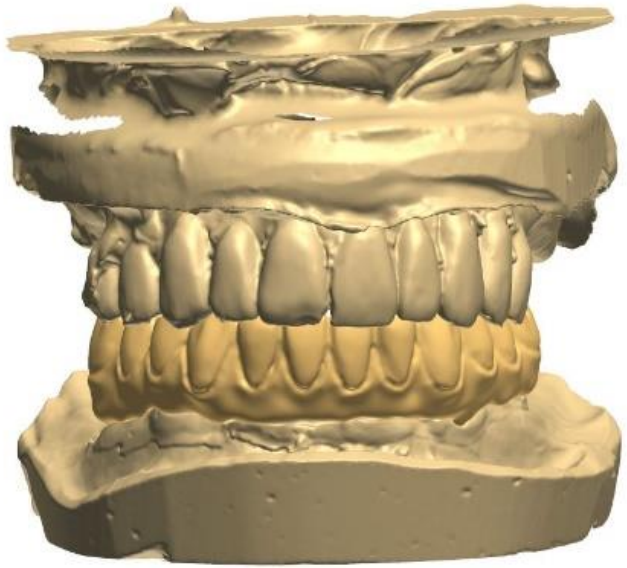
The tissue is examined, and the **Multi-units** observed. The **DESS® Multi-unit** should be retorqued into place, under manufacture specifications before made new impression for the final prosthetic restoration.

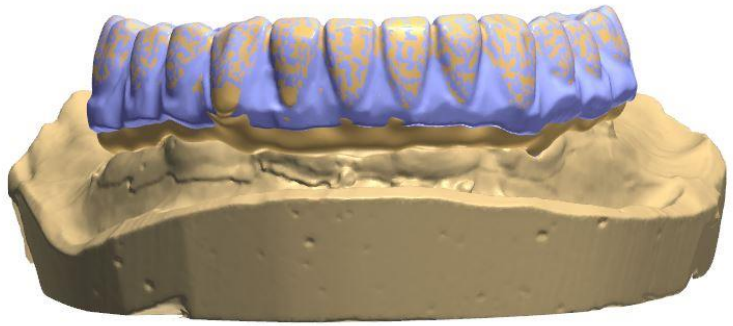


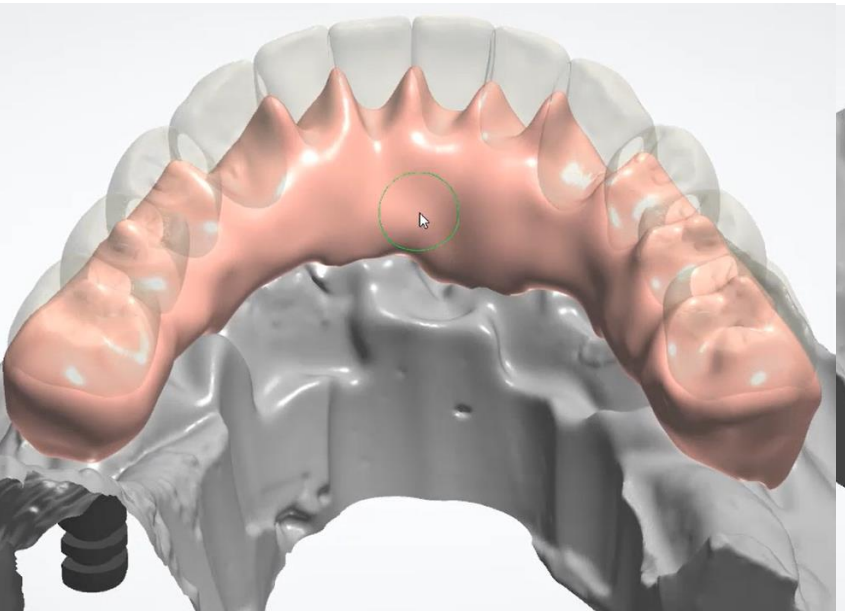


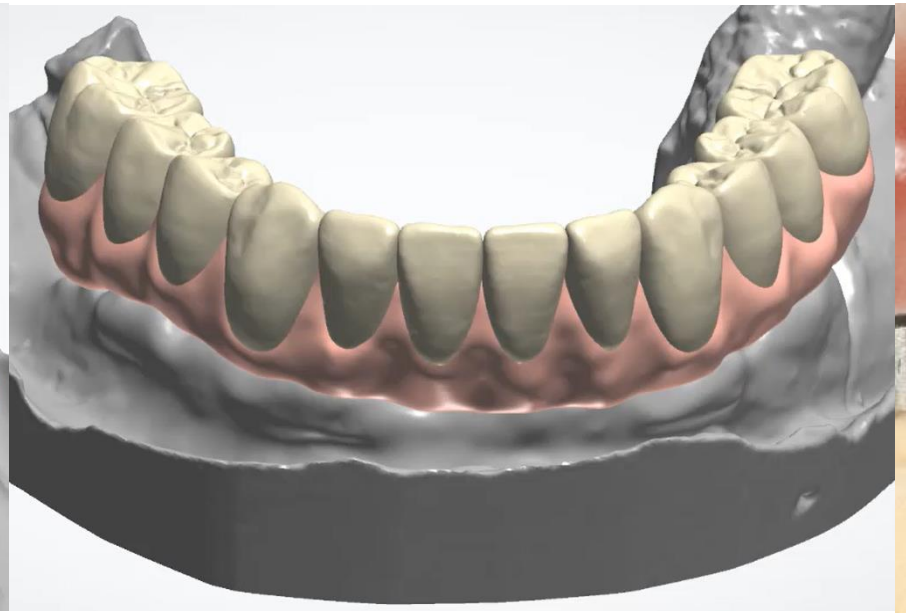
A new impression can be made via either digitally or with an analog impression. This can be done by utilizing **DESS® Multi-unit** scan bodies intraorally or utilizing DESS® impression copings an elastomeric analog impression. Once fabricated the cast can be scanned, extraoral, with the same **DESS® Multi-unit** scan bodies.

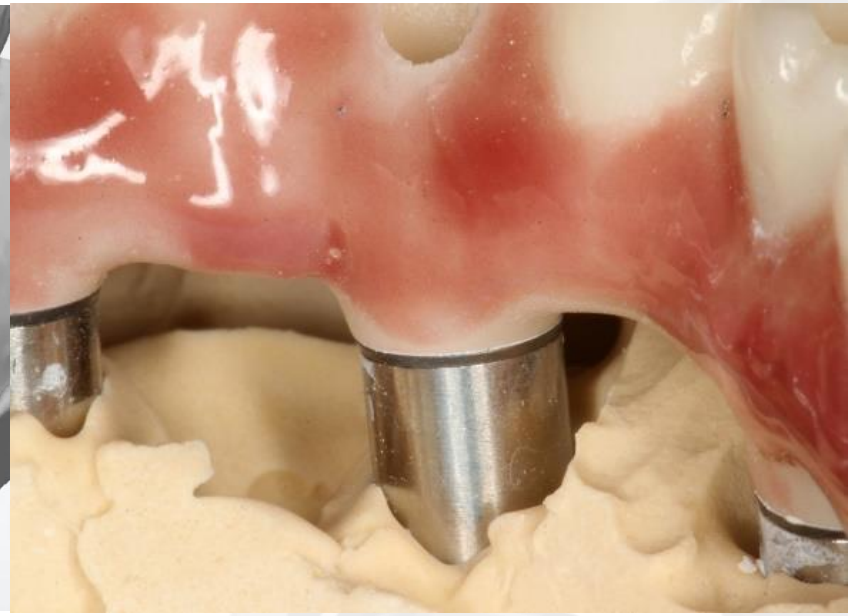
Following data acquisition, a new design is developed. Many CAD/CAM programs have the ability to bring in the previous design to be used as a reference. Alternatively, a scan can be made of the patient's provisional. If necessary, a prototype prosthesis can be milled or printed and used for Try-In purposes. The **Multi-unit ANGLEbase®** are cemented provisionally.











Once designed the final zirconia prosthesis is nested, milled, and sintered. The pink and tooth portions are colored and the **DESS® ANGLEBase®** are cemented using the standard TI-Base cementation protocol and this involves a verification jig or the master cast. Please note this secondary abutment, or TI-Base should and needs to be used due a prefabricated titanium interface is beneficial for the patient.

The prosthesis is tried in, esthetic and occlusal parameter hours parameters are verified, and the prosthesis is delivered.

The final prosthesis has angulated screw **Multi-unit** sets crews similar to the provisional prosthesis. This allows the designer and the laboratory to place the screw access in ideal locations even if straight **DESS® Multi-unit Abutments** are used.

Conclusion

The use of **DESS® Multi-Units** in the daily practice of implantologists and prosthodontists offers the great advantages that we have shown in this case study:

- All on X full arch restorations.
- Unification of the prosthetic platform even with different implant connections.
- Straight and two angled versions (17º and 30º)
- Different gingival heights
- Placement carriers included
- Assortment of abutments on Multi-unit

Check our catalog here

DESS
DENTAL SMART SOLUTIONS

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- Doctor of Dental Medicine, University of Pennsylvania School of Dental Medicine.
- Certificate in Prosthodontics, New York University College of Denistry.
- President of the Greater New York Academy of Prosthodontics in 2019.
- Former Director of Advanced Prosthodontics Touro College of Dental Medicine and assistant profesor of Post-Graduate Prostodontics NYU College of Denistry.

Brisman


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