

Medical case

Solutions for restorations with limited interproximal space

Doctor Steven A. Brisman presents a common case where solutions for small interdental spacing is key to achieving excellent results



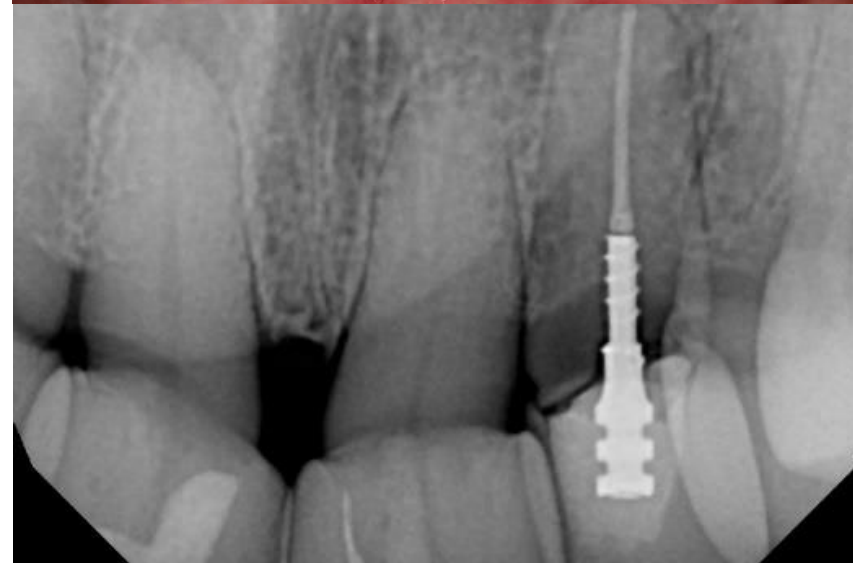


Dr. Steven A. Brisman

United States (USA)

CASE PRESENTATION

A 55-year-old, otherwise healthy male, presents in the end of 2019 with an endodontically treated tooth #10, recurrent caries, mobility, defective restoration and ultimately has a poor prognosis.



Initial situation

Introduction

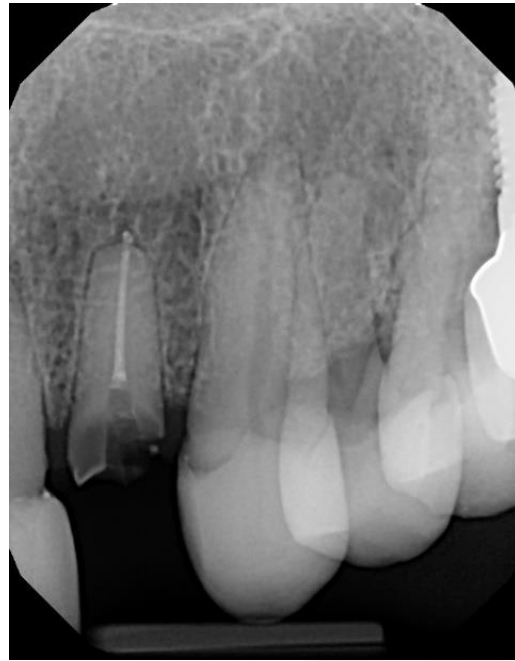
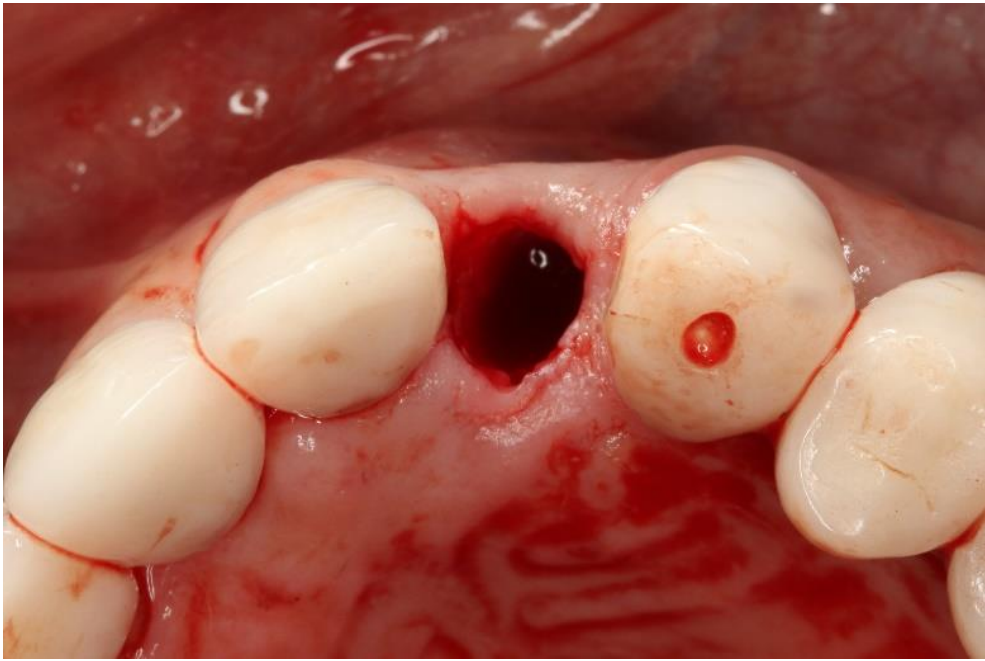


INTRO:

Patient has been advised of clinical findings, treatment plan and treatment plan alternatives. The patient has elected to replace and restore tooth #10 with a dental implant. What is important to note, very little interproximal space exists, which is prevalent in the maxillary lateral and mandibular incisor positions, in this case specially in the restorative zone.

Moreover, tooth #10 is rotated and crowded coronally leaving enough interradicular space apically for the placement of a dental implant but creates a difficulty in the restoration.

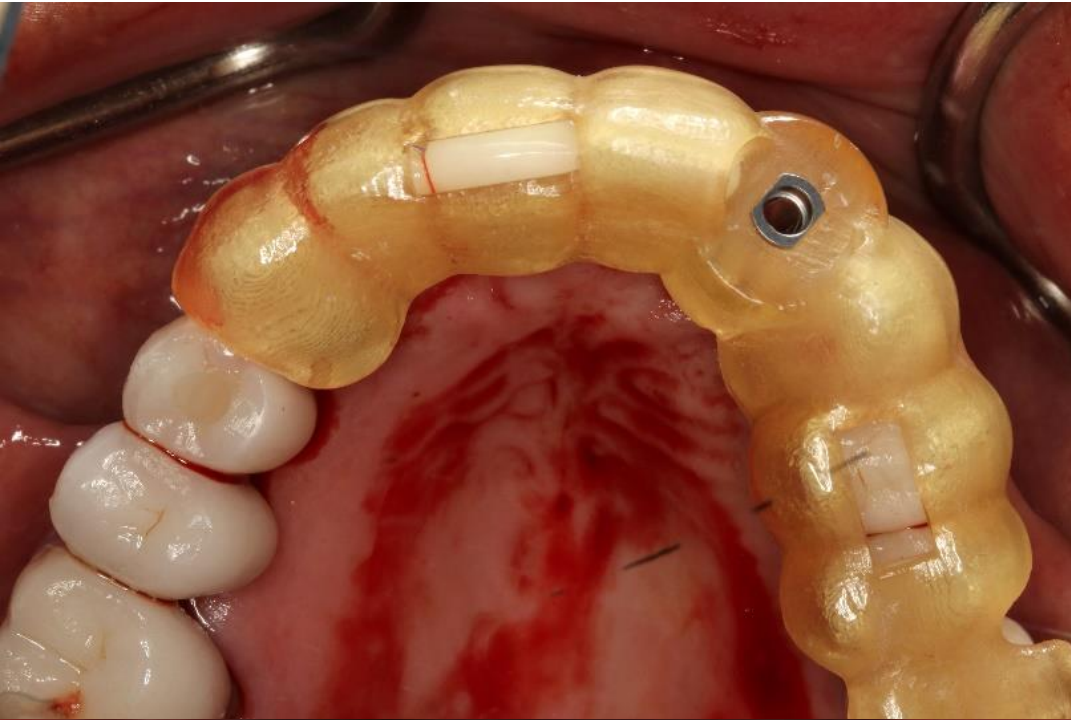
In the crowded dentition, with limited mesial-distal spacing, it is often challenging for the restorative clinician to find adequate componentry to be able to develop a screw retained restoration and in particular, with an angulated screw channel.



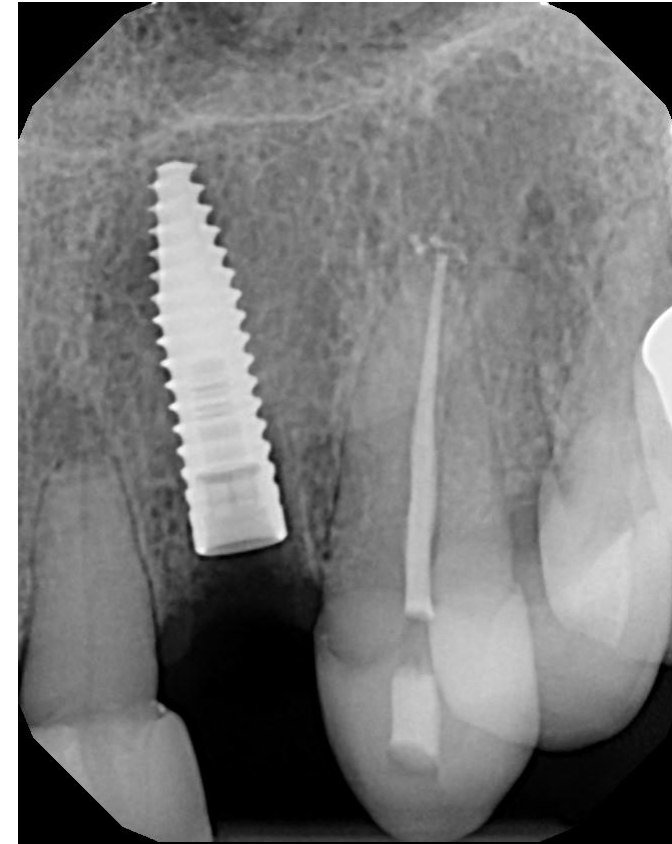
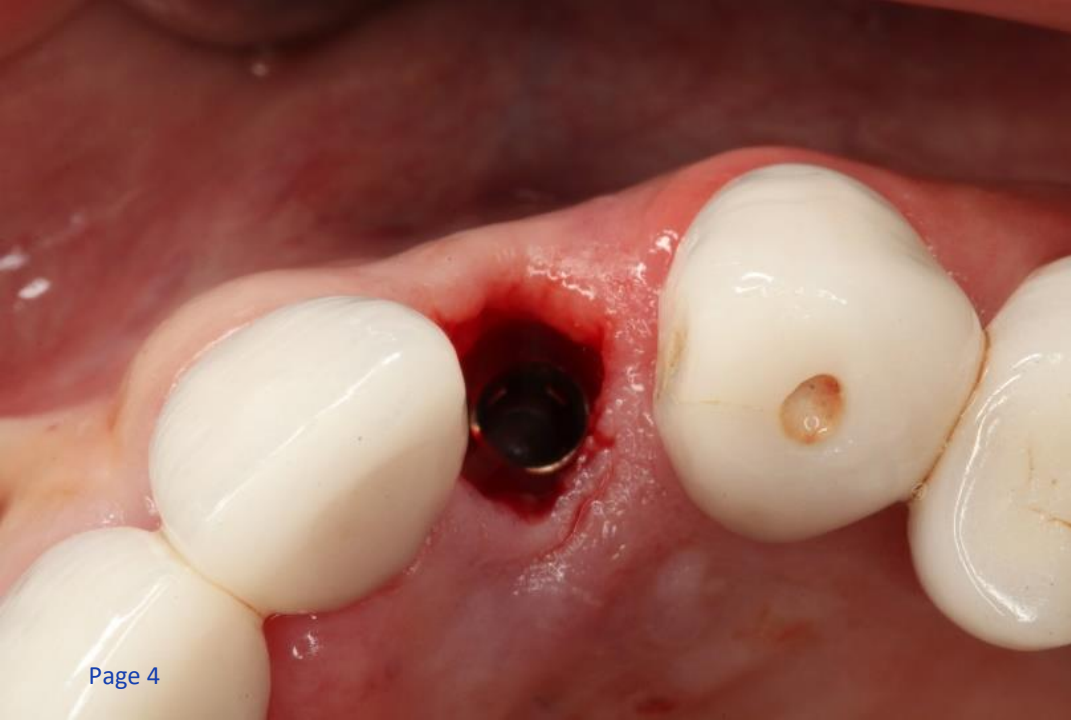
Upon presentation tooth # 10 was extracted with a flapless protocol. Digital technology has afforded the clinicians the opportunity to merge the CBCT with the STL file and virtually place the implant.

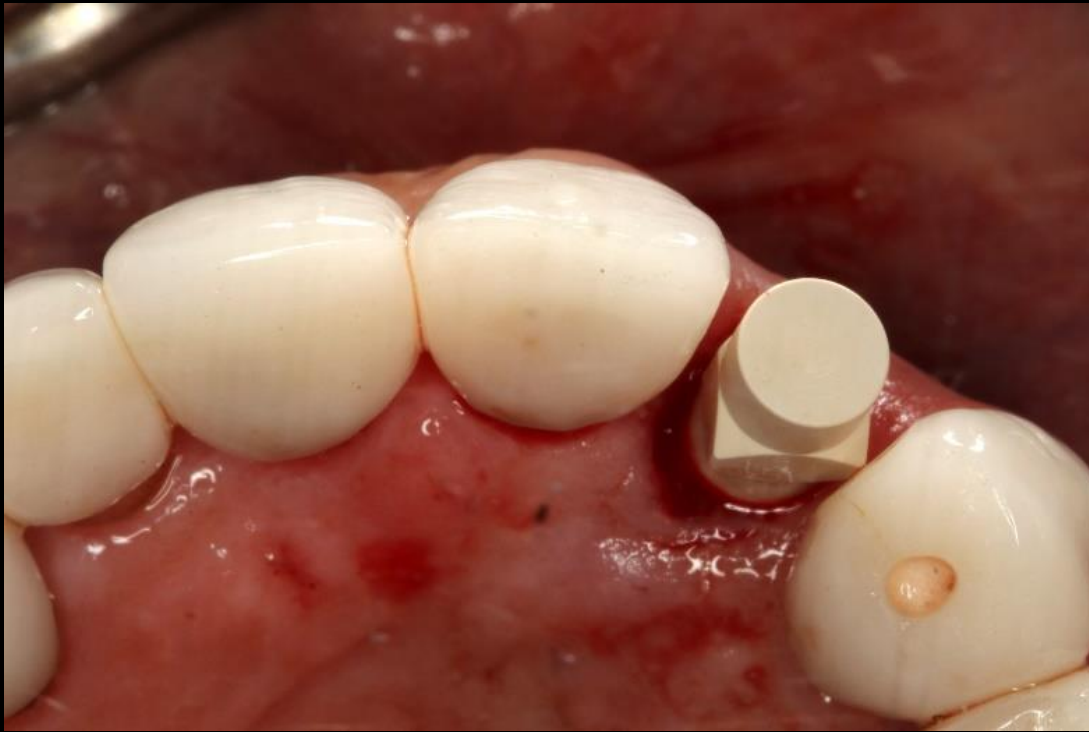
As often is the case in the anterior maxilla, limited buccal bone and concave facial osseous anatomy dictates the need to place the implant with the incisal access facially oriented to keep the implant (particularly the apical portion) within the buccal housing.





- ✔ A NC 3.3 platform implant was placed using guided surgery.
- ✔ Placing the implant and then an immediate provisional or custom healing abutment, at the time of extraction, has been shown to preserve the interproximal papilla.





Scanning, designing, and fabricating a PMMA provisional is more accurate and less plaque retentive than an analog, chair side fabricated acrylic restoration.

Here, at the time of surgery, the patient was scanned, and a provisional was milled and connected to an angulated ANGLEBase®.

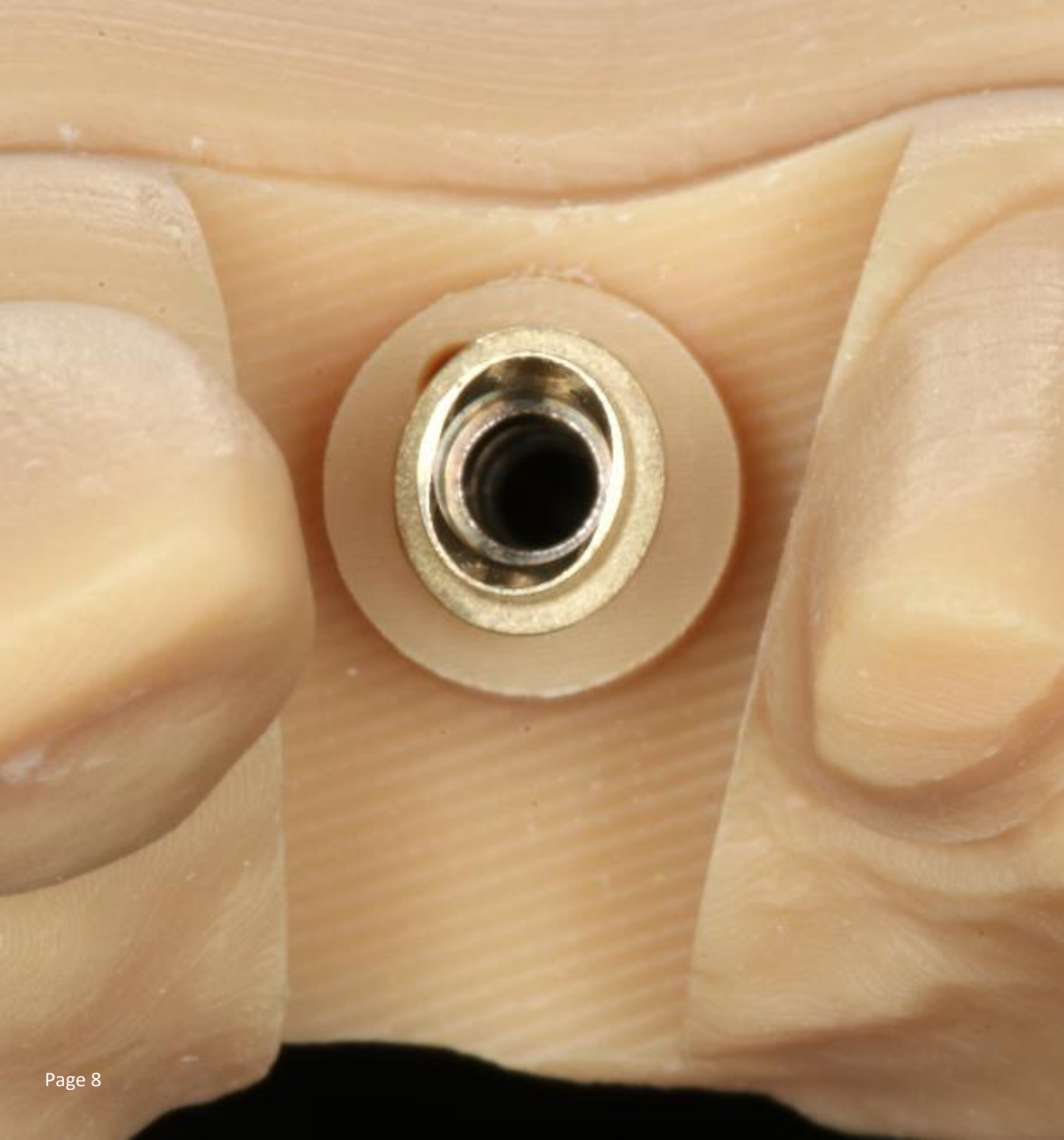
Using angulated screw technology, a restoration can be placed leaving the screw access hole on the palatal or lingual surface of the restoration.



What are the solution for the final restoration?

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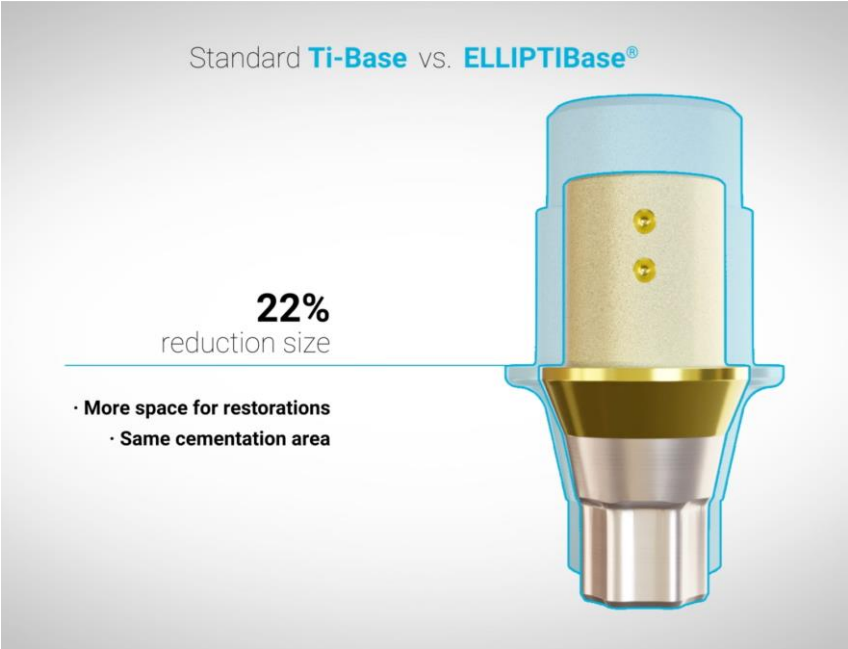


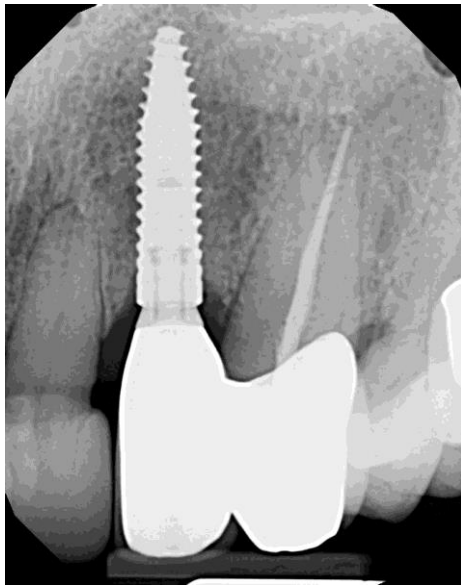
ELLIPTIBase®

The Ultimate Solution for narrow spaces!

In 2020 DESS® launches a new, self-developed abutment: ELLIPTIBase®, the angulated screw channel solution for narrow interdental spaces.

Specially designed for limited mesio-distal spaces, 22% smaller compared to DESS® Ti-Base, pericoat® surface treatment, Selectgrip® surface for up to 5 times more cementation retention and with the possibility to angulate to up to 20°.





- ✓ Following osseointegration, the patient presents for the final restoration on numbers # 10 and # 11.

Ideal interproximal spacing and emergence profile for each tooth can be accomplished with our new elliptical base: **DESS® ELLIPTIBase®**.

- ✓ Here, the original root anatomy of the missing lateral incisor can be duplicated in the final restoration with the screw retained angulated screw channel solution.

A strong evidence...

To provide a solution for cases like the one we are showing with limited interproximal space in small implant platforms, led DESS® to develop a new own product and launching this unique screw angulated solution on the market in 2022.

Thanks to this new solution, we were able to restore the implant designing the Zirconia crown with a more anatomic gingival emergence, aesthetic and functional way in the narrow spaces.

In fact, it can be seen perfectly in the comparison of the two images, the final restoration made with ELLIPTIBase® (top image) and the provisional restoration made with ANGLEBase® (bottom image).

Before



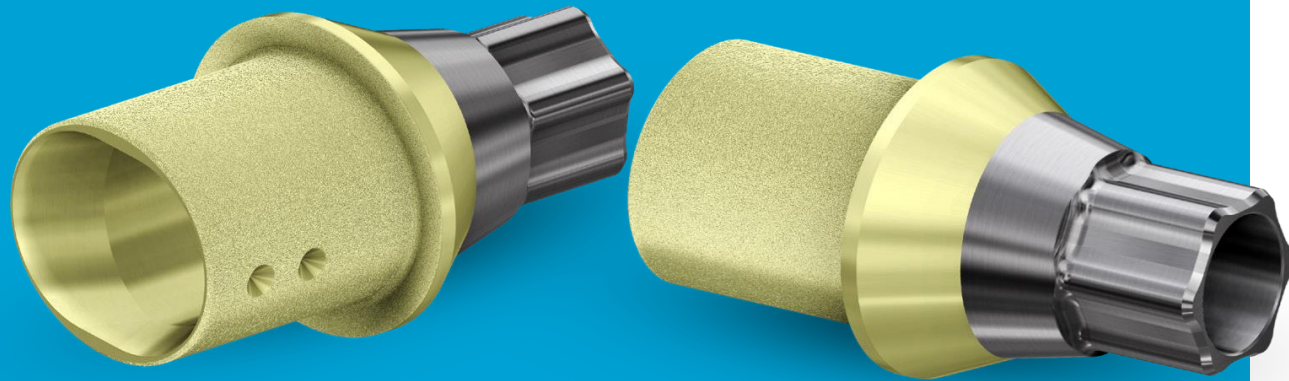
- x Tooth #10 rotated and crowded
- x Difficult restoration in a narrow interradicular space

After



- ✓ Use ELLIPTIBase®: best angulated solution for narrow spaces
- ✓ Best aesthetic and functional final restoration
- ✓ Design Zirconia with ideal gingival emergence

ELLIPTIBase®



The Perfect Fit



TECHNICAL INFORMATION

- Titanium Grade V ELI 23
- PerioCoat® and SelectGrip® surface treatment
- Elliptic design with minimized footprint
- Especially developed for narrow implants (3.0-3.3-3.5)
- Up to 20° bidirectional angulation of the ASC (Angulated Screw Channel)
- Typically a cementing surface 31,55mm²
- Shaft height of 3,0mm
- Combined with our free libraries for Exocad®, 3Shape®, Dental wings® and Blenderfordental®
- CE: Class IIb
- FDA: Class II



FEATURES

- Pure Switch® concept
- Torx® ball based screw socket
- Torx® screw included - same screw design as OEM
- Two orientations for clinical adaptation: corner and flat
- Optimal aesthetic screw channel exit



CLINICAL BENEFITS

- 22% width reduction compared to regular Ti-Base
- SelectGrip® surface treatment: 5x better cement retention
- PerioCoat®: increases the strength of the abutment
- Torx® ball screw: optimal torque even at maximum angulation
- Warmer gingival tone



Dr. Steven A. Brisman

USA

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

Brisman

