

Medical case

Dr. Steven A. Brisman - USA

Doctor Steven A. Brisman presents his first medical case after using DESS® products for years.





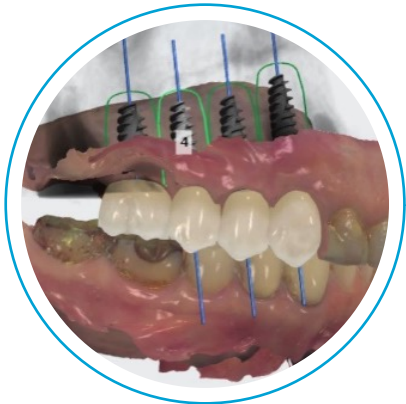
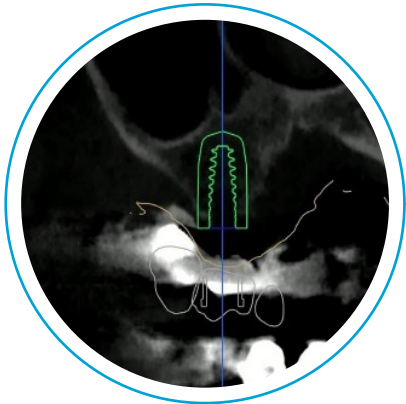
Dr. Steven A. Brisman
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CASE PRESENTATION

70 Year old patient presents with a failing fixed partial denture in the maxillary right quadrant. Preoperatively the patient is missing teeth numbers 3 and 4 with a modest ridge defect in the area of #3. Teeth #'s 5 and 6 are deemed to have a hopeless prognosis.

The patient was informed of clinical findings, treatment plan and treatment plan alternatives. Patient elected to be restored with dental implants to achieve a fixed restoration.



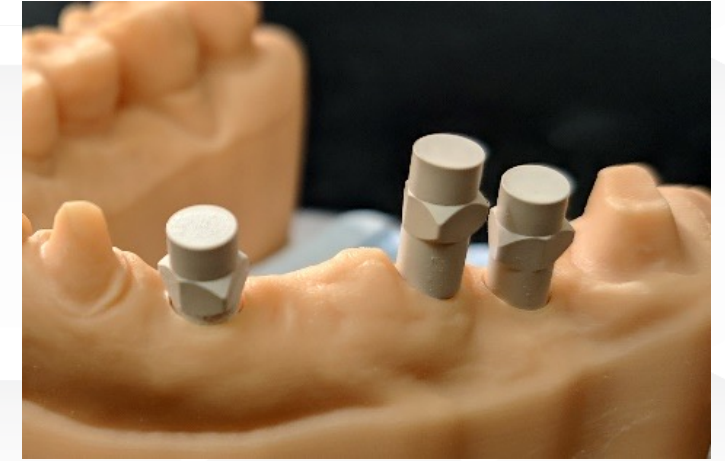
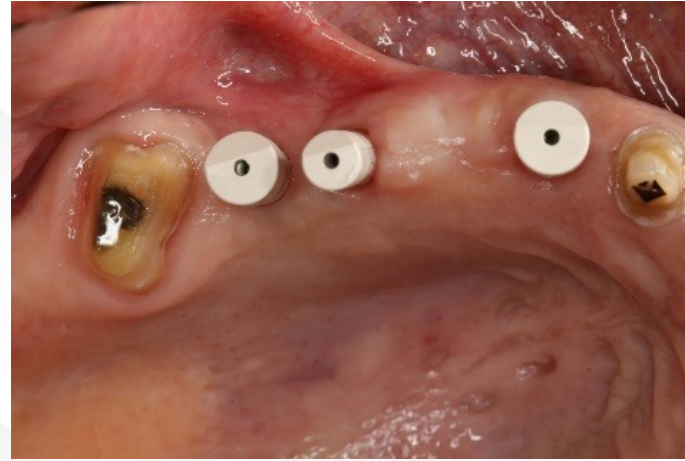
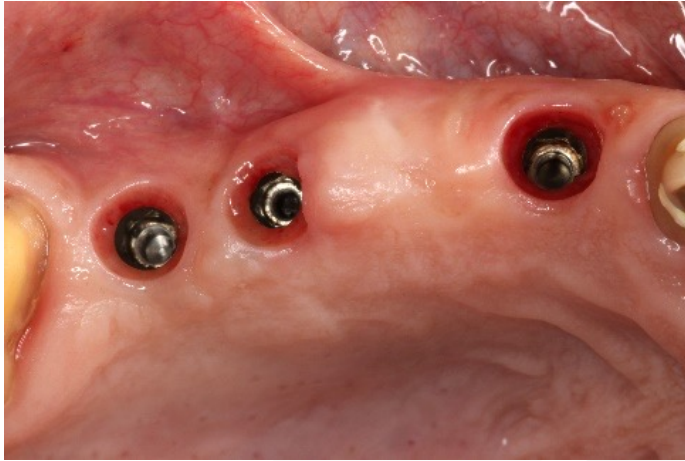


Treatment planning process

During the treatment planning process, a cone beam (CBCT) was taken along with a surface (intra-oral) scan. The DICOM and STL files were merged into the implant planning software.

A diagnostic wax up was completed followed by the virtual placement of implants that were treatment planned for sites teeth #'s 3 4 and 6. (And potentially #5). Following surgical and prosthodontics approval, a surgical guide was fabricated.

The patient was initially provisionally with a PMMA fixed partial denture spanning teeth #'s 2-7. At time of surgery the hopeless teeth were extracted, implants and bone grafts were placed. The Patient tolerated surgery without complications.



Following healing, the implants were uncovered during Stage II and prefabricated standard healing abutments were placed. Subsequently, a reevaluation or retreatment planning is performed post surgically, prior to restoration fabrication. It is important to note, at this time, that the prosthodontic final treatment plan is determined, and restorative componentry is selected. The first step of the postsurgical treatment planning is Data Acquisition.

This can be done intraorally or extraorally. Intraorally, this is accomplished with titanium (DESS®) scan bodies. Alternatively, a fixture level analog impression is made and a cast can be fabricated. Following fabrication of the cast, the DESS® Scan Abutments can be placed on the model and scanned via laboratory scanner. The DESS® Scan Abutments have the same coronal morphology. The apical morphology is commensurate with the implant manufacturer, connection style and size.

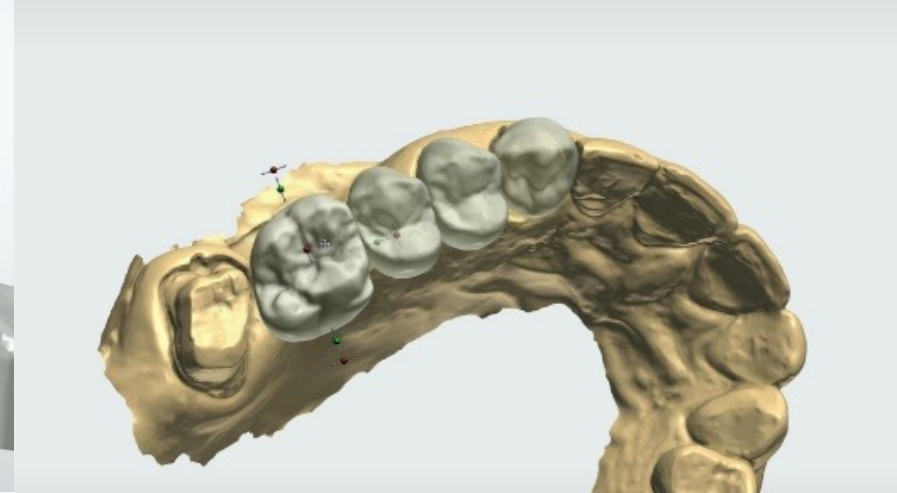
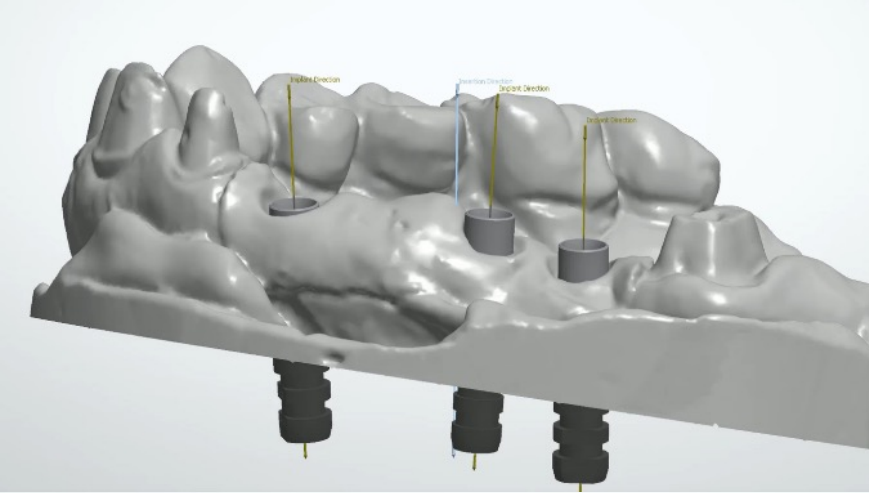


For workflow efficiency and practicality, it is beneficial to utilise the DESS®, third-party, scan flags.

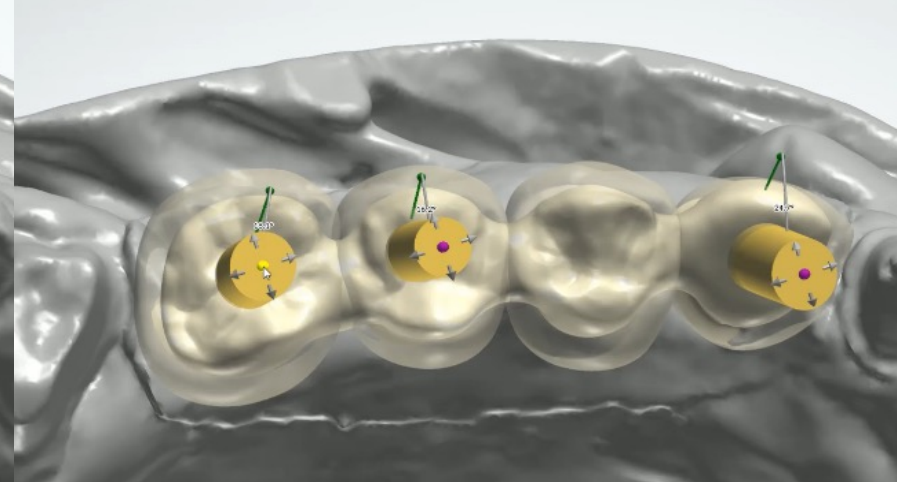
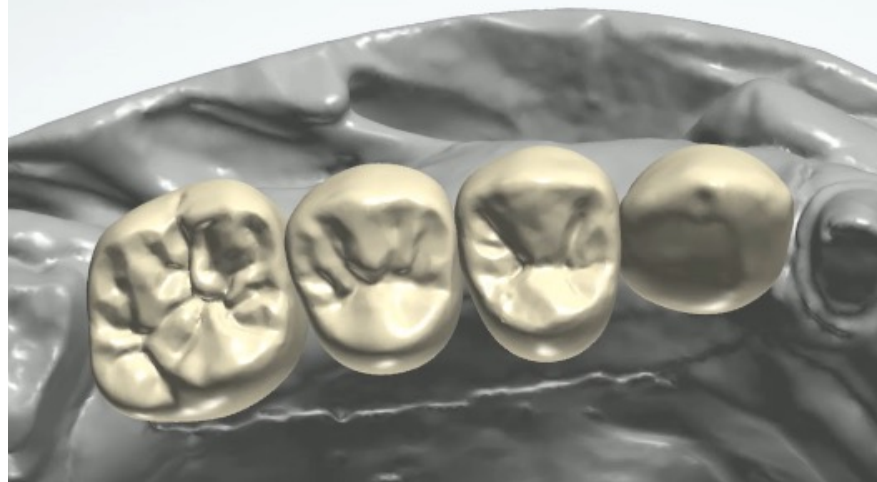
This is because at the time of data acquisition, the patient may present with multiple implant manufacturers, various connection types and sizes. Also, if a screw retained restoration is desired, angulated screw channel protocol can be used.

Often, anatomical limitations and small discrepancies, even with guided surgery, create challenges if angulated screw channels were not used. Since a retreatment plan and redesign is required post-surgically and the final restoration design has not been decided upon at the time of data acquisition, it becomes imperative to utilise universal or DESS® componentry.

Digital Design



3Shape



Once the data is acquired in the form of an STL, the second step is Design Development.

In the digital laboratory workflow, the restoration is designed with a CAD/CAM program. It is important to note that DESS® library files, DME's in the case of 3shape, must be imported prior to design.

Abutment selection

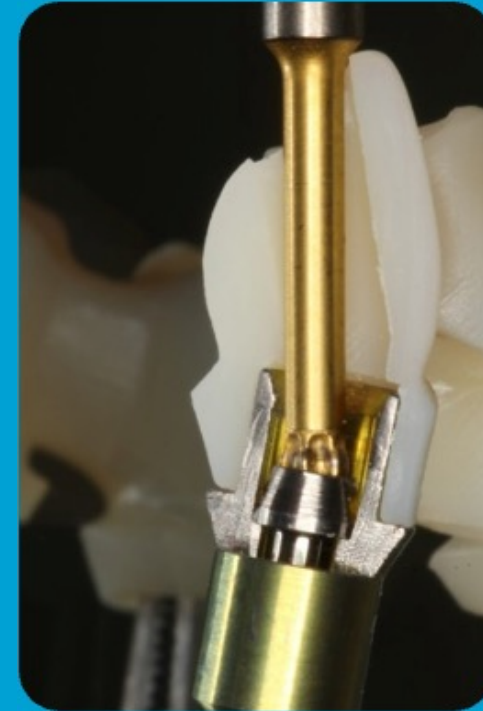
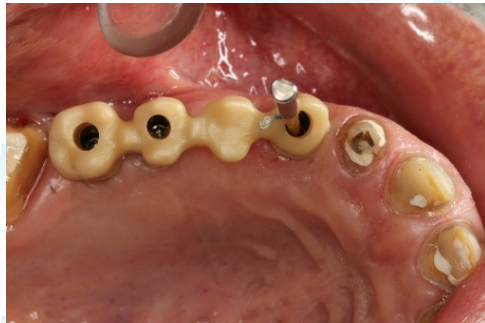
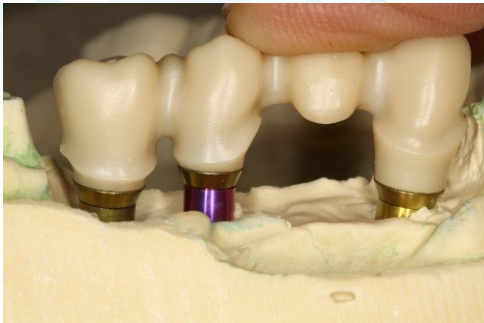


The third and final step is the manufacturing of the restoration. It is greatly advantageous to utilise the Angulated Screw Channel option: **DESS® ANGLEBase®**

Prototype



In this patient treatment, the restoration goes right to the fixture level. The transmucosal element is comprised of the Ti-Base as well as the zirconia frame.



The zirconia frame can be manufactured in full cut back, as in this case, necessitating the layering of feldspathic porcelain. Alternatively, the zirconia can be designed with facial cut back or full contour.



Prosthesis finalised

Adaptation and final luting of the **ANGLEBase®** into the zirconia framed is accomplished following the manufacturers protocol of the luting (cement) agent.

The **ANGLEBase®** adaption is best performed on a verification cast.



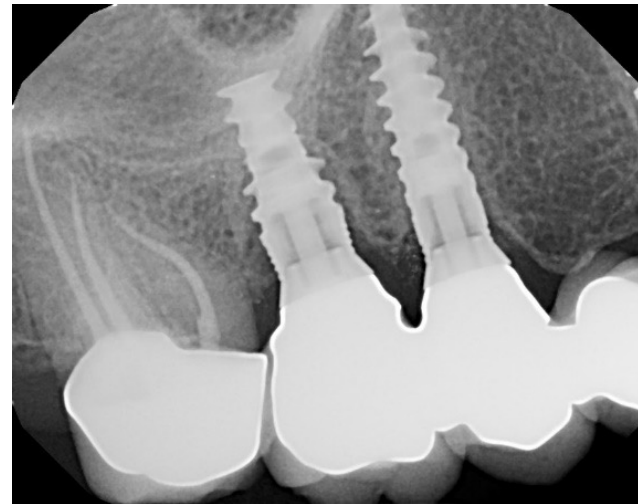


Final restoration placement

The final restoration is tried in and inserted.

DESS® screws are torqued into place following the DESS® manufacturing specifications.

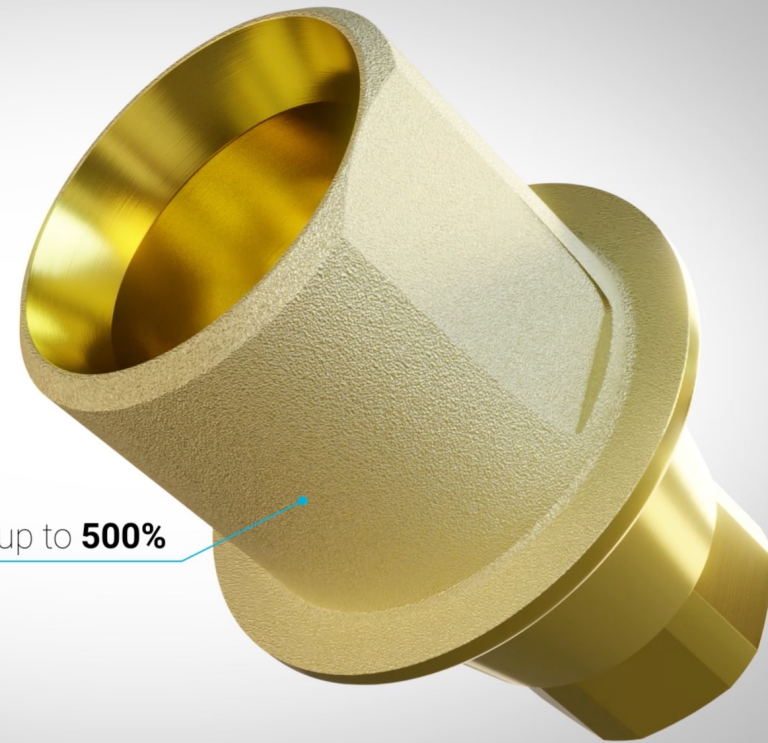
Occlusion is verified, radiographic analysis is performed to verify placement and access cavities are sealed with composite resin.





SelectGrip®

Increases bonding retention up to **500%**



Final Result

After prosthesis placement:

- ✓ Optimum aesthetic results thanks to DESS® angled solution: ANGLEBase®
- ✓ Perfect adaptation to soft tissues

Conclusion

DESS® ANGLEBase® is the ultimate angled solution, with the most flexible angular channel on the market since 2015.

- ✓ Gold anodised surface for better aesthetic results.
- ✓ SelectGrip® Surface: offers 500% more bonding retention than an untreated Surface
- ✓ Short shaft to give 360° angular freedom.
- ✓ Specially designed emergence hole.
- ✓ Manufactured in Titanium Grade V ELI.



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.

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