



**Arnold Rosen, DDS, MBA**  
Prosthodontist  
Private practice, Boston, MA

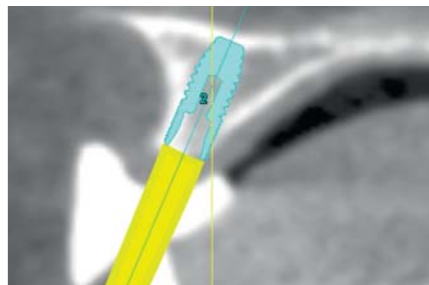
**Atlantis® Conus Abutment – Treatment of the fully edentulous patient with a fixed removable prosthesis**

A 54-year-old female presented with a chief complaint of difficulty eating and chronic sores from a 22-year-old complete upper denture (CUD). A thorough examination uncovered an atrophic maxilla, deep vertical anterior overbite, loss of vertical dimension of occlusion (VDO), and a prosthesis that was worn thin, unstable, and that had fractured at least two times. Her mandible was partially-edentulous with multiple restorations, and she has no dental insurance and limited financial resources.

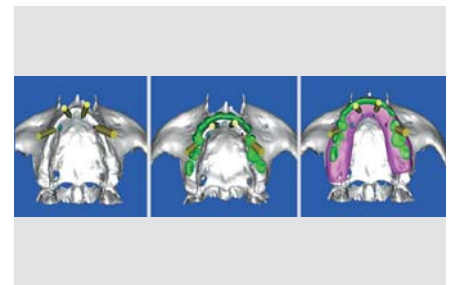
The Atlantis Conus Abutment solution was selected for its surgical and restorative simplicity, and as a cost-effective treatment that satisfies the patient’s stability, restored function and esthetics, and easy hygiene maintenance.



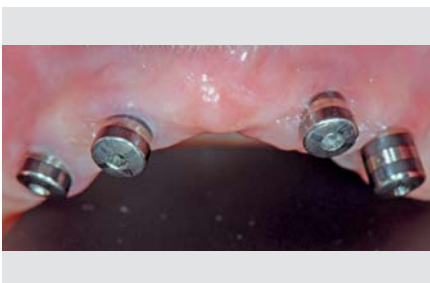
**1.** After rebase, the complete upper denture was duplicated in a translucent radiopaque resin.



**2.** A CBCT was taken and viewed in Simplant software for case planning. The radiopaque duplicate simplified the process of planning the position of the implants and provided the opportunity to measure available space for the overdenture abutments and copings.



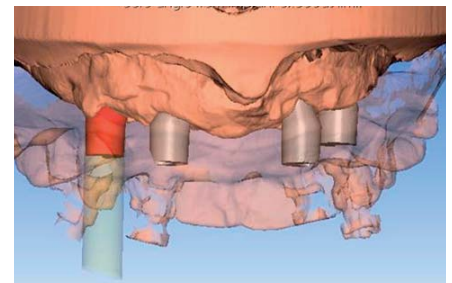
**3.** The masking feature in Simplant software allowed for planning of optimal implant locations in relation to the denture teeth and the denture base ensuring that the abutment emergence was within the body of the complete denture.



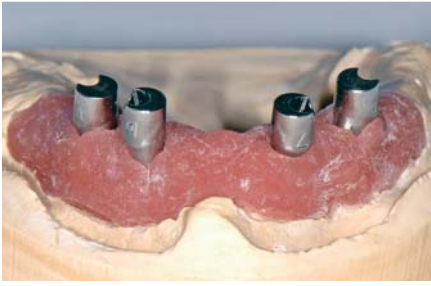
**4.** Four OsseoSpeed TX 3.5 S implants (two 8 mm, two 9 mm) were placed with Healing Abutment Uni. Before relining with a soft material, the denture base was relieved to prevent any contact with the healing abutments.



**5.** The duplicate denture was adjusted and used as a scanning guide for the design of Atlantis Conus Abutments and tooth position reference for the new denture setup. The duplicate denture was modified and used for an open-tray impression for implant pick up and an occlusal record base were taken.



**6.** The implant cast and duplicate denture were scanned. The denture base served as an aid in establishing the optimal path of insertion for the parallel abutments and of the new denture.



**7.** The four Atlantis Conus Abutments are perfectly parallel to each other and to the plane of occlusion. They were positioned for the body of the denture and finished on the master cast with soft tissue moulage ready for insertion.



**8.** The abutments were inserted and checked for proper placement and torqued to 25 Ncm.



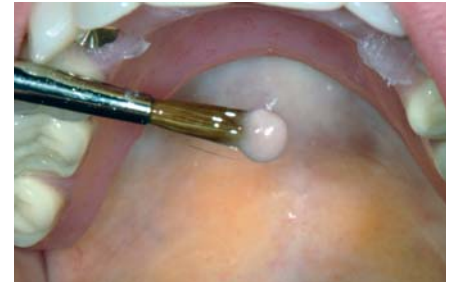
**9.** Four Ankylos Taper Cap Deglors for SynCone 4° were placed with light finger pressure.



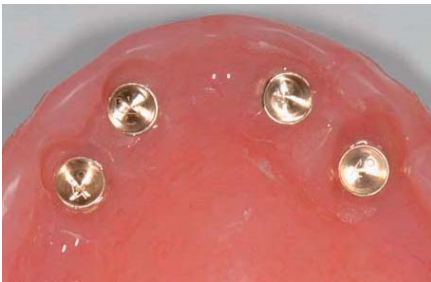
**10.** Silicone sleeves were placed under the tapered caps to ensure that no pick up material would engage an undercut.



**11.** The new complete upper denture was adjusted for access to the abutments and copings and to ensure that there was no contact with the abutments and tapered caps.



**12.** Denture base autopolymerizing resin was used to engage the copings. During this process, the denture was held in place with light finger pressure. After curing time, the denture was removed and cleaned.



**13.** The process of engaging the copings was completed and finished in the laboratory.



**14.** Small horizontal grooves that could be engaged with vertical pressure for removal were placed on each side of the denture.



**15.** Final result

**Clinician case note:** For most cases, a framework is fabricated for the denture. However, due to the smaller anatomical oral structure and slight physical build of the patient, it was determined that a framework was not critical for the case. In addition, the patient elected to keep the palate.

The technician for the new complete denture was Robert Kreyer, CDT of Custom Prosthetics Inc. in Los Gatos, CA.

This case report is published as an inspiration for you as a clinician and not necessarily as a recommendation from Dentsply Sirona.

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