

Patient-specific abutment – just as prepared natural teeth

As the founder of Atlantis, Dr. Julian Osorio has long-term experience and working knowledge of Atlantis abutments. The Atlantis solution was created with the goal of simplifying implant dentistry by using digital technology to improve esthetics, reduce time-consuming manual labor and increase predictability.

Thirty-year-old female with missing permanent maxillary lateral incisors. The patient has a history of retained deciduous cuspids and permanent cuspids that were orthodontically moved to the position of the missing laterals. The deciduous cuspids are now mobile and failing, and in need of extraction. The patient also has esthetic concerns and would like to improve the appearance of her smile. Due to insufficient space required on the upper right for implant placement, a decision was made to extract the deciduous tooth and replace it with a three-unit zirconia bridge. It was also decided that the two central incisors and the left lateral incisor would be restored with single zirconia crowns and that the deciduous cuspid on the left side would be extracted, replaced with an implant and restored with an Atlantis Abutment and a zirconia crown (Lava Zirconia, 3M ESPE).



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1. Pre-treatment situation. Notice the maxillary deciduous cuspids in the correct position, and the permanent cuspids (canines) in the position of the missing laterals.



2. Pre-treatment radiograph.



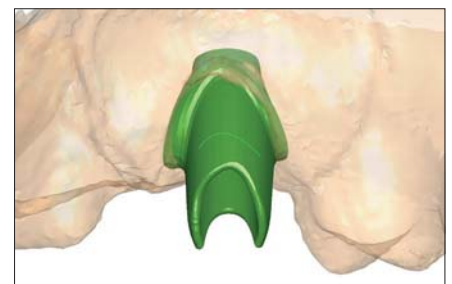
3. Provisional bridge made from diagnostic wax-up.



4. Prepared teeth prior to final impression. Selected shade: VITA B1.



5. Radiograph taken on the day of implant placement.



6. Buccal view image of the designed Atlantis Abutment generated in Virtual Atlantis Design (VAD) software.



7. View of prepared teeth in combination with an Atlantis Abutment in titanium, installed in the position of the left canine.



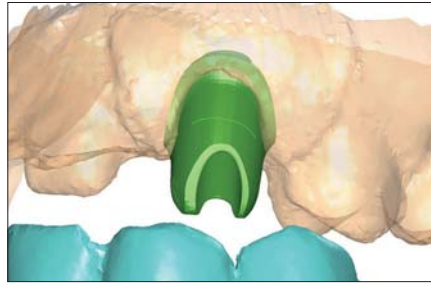
8. Atlantis Abutment in titanium placed to develop soft tissue contours.



9. Radiographic view of the implant in situ five months after placement.



10. Clinical situation of the temporary restoration.



11. Utilizing the existing digital design file of the original Atlantis Abutment in titanium, a new order was placed 8 weeks later. The design was reviewed and the material changed.



12. The design of the Atlantis Abutment in zirconia was slightly modified from that of the original Atlantis Abutment in titanium to best support the changed soft tissue contours.



13. Final single all-ceramic crowns and bridge (Lava Zirconia, 3M ESPE) on the master model.



14. Atlantis Abutment in the clinical situation, torqued to 20 Ncm on an OsseoSpeed implant connection (Astra Tech Implant System), demonstrates ideal adaptation of the abutment to the soft tissue.



15. Radiograph of the implant with final Atlantis Abutment in zirconia and all-ceramic crown (Lava Zirconia, 3M ESPE) in place.



16. Post-treatment.



17. Final implant restoration five months after implant placement.



18. The patient's wish for an esthetic smile and improved appearance is fulfilled with the help of an implant-supported restoration that's just like natural teeth.

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