

## Azento™

### Replacement of failed tooth #3 with Astra Tech Implant System® EV and Azento—Single tooth replacement solution

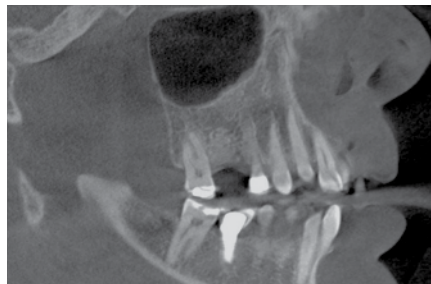
A 63-year-old woman presented to her general dentist with swelling and pain above tooth #3, four months after her gold crown broke off. The tooth was atraumatically removed. The site was grafted with Symbios® mineralized cancellous powder and protected for six weeks with a Symbios® OsteoShield® PTFE barrier membrane. Four months after extraction and grafting, prosthetically-based implant planning with Azento, using GALILEOS® CBCT and CEREC® CAD/CAM data, the procedure was performed. The custom healing procedure was chosen to help develop the soft tissue contours for the final prosthesis.



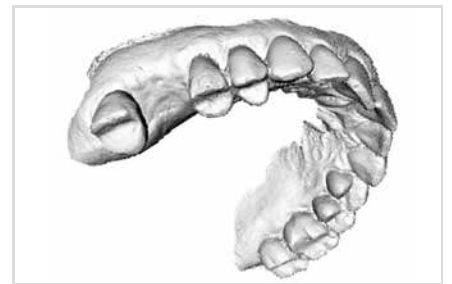
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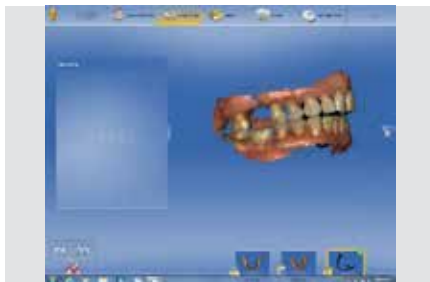
**1.** Pre-operative radiograph demonstrating periapical radiolucency and widened PDL space around the roots of tooth #3.



**2.** Four months after extraction and ridge preservation grafting, the edentulous space shows good bone volume and density needed for implant planning.



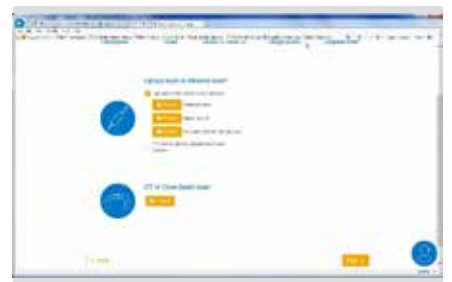
**3.** Digital rendering of maxillary arch and healed extraction site of tooth #3. Adequate ridge volume and keratinized tissue to allow for flapless implant surgery can be appreciated.



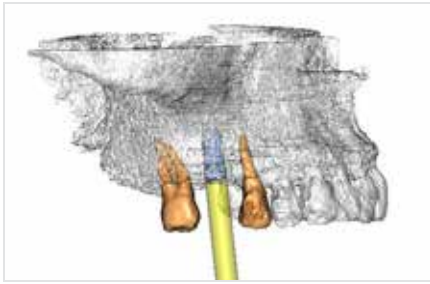
**4.** Digital impression of maxillary and mandibular arches in occlusion acquired with CEREC Omnicam. This was converted to a stereolithographic (.stl) file for uploading to the Azento portal.



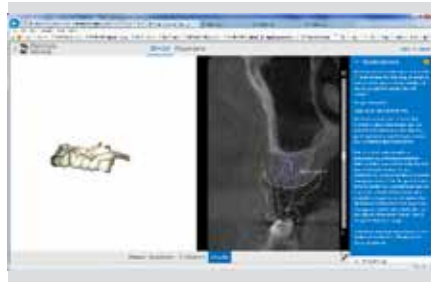
**5.** The Azento clinician portal facilitates efficient and easy case submission to Dentsply Sirona Implants for integrated implant and prosthetic planning.



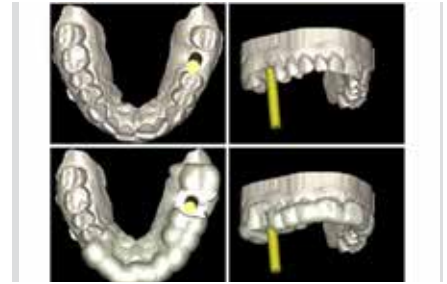
**6.** DICOM files from GALILEOS CBCT along with .stl files of both dental arches are uploaded with just a few clicks of the mouse.



**7.** Within one business day of the case being uploaded, expert technicians develop the prosthetically-based implant plan for approval by the clinician. Multiple views allow detailed assessment of the proposed implant position and prosthesis.



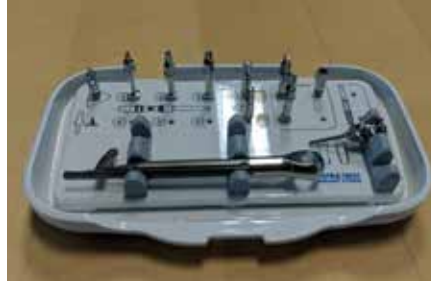
**8.** The Azeno case viewer shows the implant position in the edentulous maxillary site as well as an interactive 3D view of the plan.



**9.** This detail view shows the axis of the position of the proposed implant and relationship to the patient-specific surgical guide.



**10.** After case approval, the Azeno solution arrives, containing the planned implant, surgical guide, drills, and custom healing abutment needed for fully-guided implant and restorative procedure.



**11.** The Small Tray EV, Surgical is used to stage the case specific drills and instruments for the procedure. The drills were delivered sterile with pre-assembled sleeves.



**12.** With the surgical guide in place, the final osteotomy is completed with precision and accuracy.



**13.** The implant is inserted through the surgical guide to control its position, angulation, and depth of placement, in accordance with the approved plan.



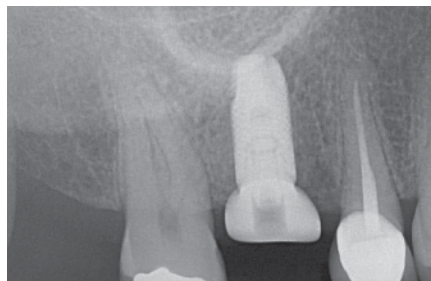
**14.** Once the implant has been seated to the proper depth, the insertion torque value is measured. The optimal value is 25 - 35 Ncm\*. \*Maximum torque 45 Ncm.



**15.** The OsseoSpeed EV implant in place, exactly as planned.



**16.** The custom Atlantis healing abutment is placed, with the abutment screw tightened with light finger force (5-10 Ncm).



**17.** Post-operative radiograph showing implant placement exactly as planned and the custom Atlantis Healing Abutment completely seated.



**18.** Clinical appearance at the four month post-operative visit, demonstrating good tissue health and support of the interproximal attached gingiva.

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