Tooth 36 (FDI) custom healing procedure with a Xive® implant

The patient is a 62-year-old male. Tooth 36 had a previous root canal and crown. The mesial root had a vertical root fracture making the tooth non-restorable. The tooth was subsequently extracted and ridge preservation was performed. After 4 months of healing, a CBCT and Omnicam scan were obtained. Due to the patient’s bruxism habit, delayed loading was the treatment path of choice.

1. Patient’s healed edentulous space shows adequate keratinized tissue to perform a flapless tissue punch technique.

2. CBCT data shows adequate bone for a Xive 4.5mm X 11mm implant.

3. Omnicam scan obtained.

4. A surgical plan is developed, based on the restorative plan. The planning software shows both the 3D and 2D data.

5. The Azento order lists all of the components necessary to complete the case.

6. A step-by-step surgical plan is included to give the surgeon a road map for a successful surgery.
7. The fit of Simplant SAFE Guide is verified. The guide offers good adaptation and excellent stability.

8. The tissue punch is used to gain access to the bony crest.

9. Gingival tissue is removed, revealing the exposed bony crest.

10. The Sleeve-on-Drill system offers the operator more freedom and easier access to posterior teeth.

11. The final osteotomy shows good keratinized tissue surrounding the implant.

12. The guide controls the depth and angle, as the implant is inserted. By aligning a dot on the lingual of the implant driver, the timing of the implant matches the surgical and restorative plan(s).

13. Guided implant surgery allows perfect placement of the custom healing abutment which will also match the final abutment in location and emergence profile. The final abutment and crown can be fabricated without rescanning the patient, as long as tissue changes are minimal.

14. The final radiograph shows the excellent contour of the Atlantis Healing Abutment. That contour will be replicated in the final abutment.

15. Two-week post op of the Atlantis Healing Abutment in place shows excellent healing. The tissue will now heal to these contours, eliminating the need for an additional appointment, and making the final restoration have ideal emergence.

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