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## Case study

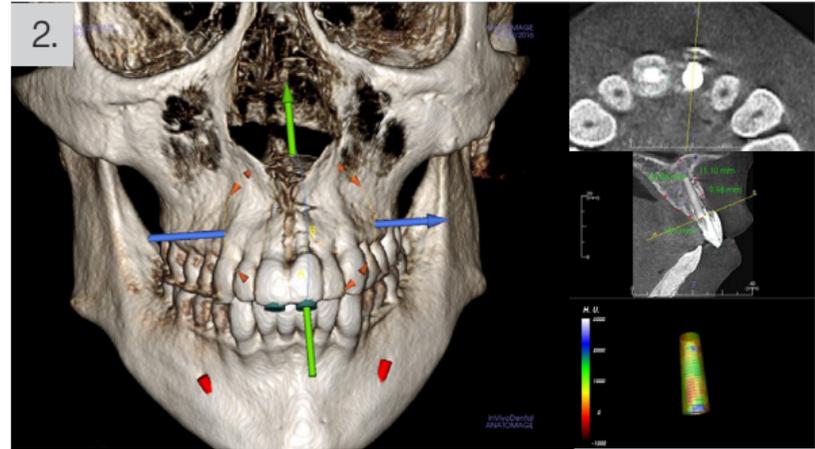
# V3 Clinical Case

### Patient Information

Matthew Vogan (male, 25 years old) came to our office with his chief complaint of tooth mobility on left central incisor (# 21). At this time, we decided to do an initial CBCT to diagnose the cause of this mobility. We suspected the cause; as he described himself 5 years earlier, jumping in a pool and having the two upper front central incisors (# 11 and 21) traumatized. At this time, the left central came out. His doctor at the time re-implanted #21 and did endodontic treatment on both teeth, finishing the treatment with two lithium desilicate crowns. He had a clean bill of health at the moment of our surgical intervention. The following pictures will describe what we diagnosed and the clinical (surgical - prosthetics) steps we took to resolved the case. Showing the final clinical outcome at 1 year's time.



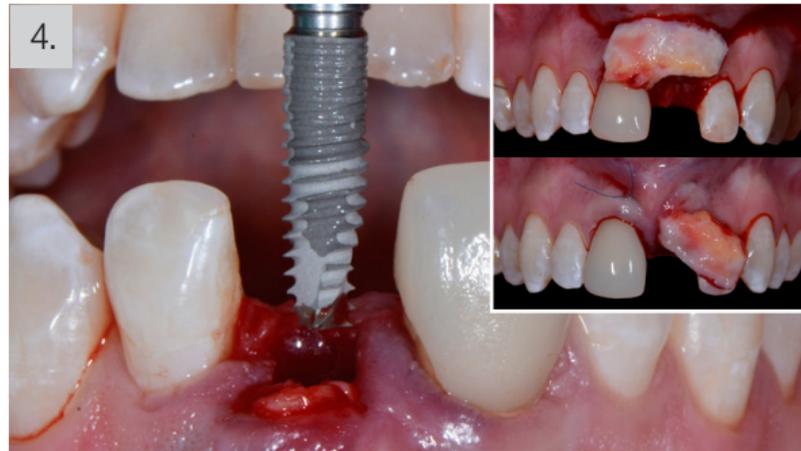
Initial pictures showing poor crown design and inflammation of the gingival margin on tooth # 21.



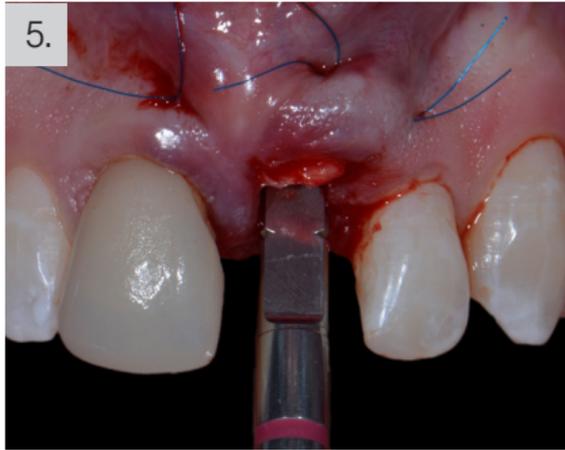
CBCT establishing the cause of the mobility on #21, internal resorption with marginal bone loss. Also our digital planning for the dental implant's final position.



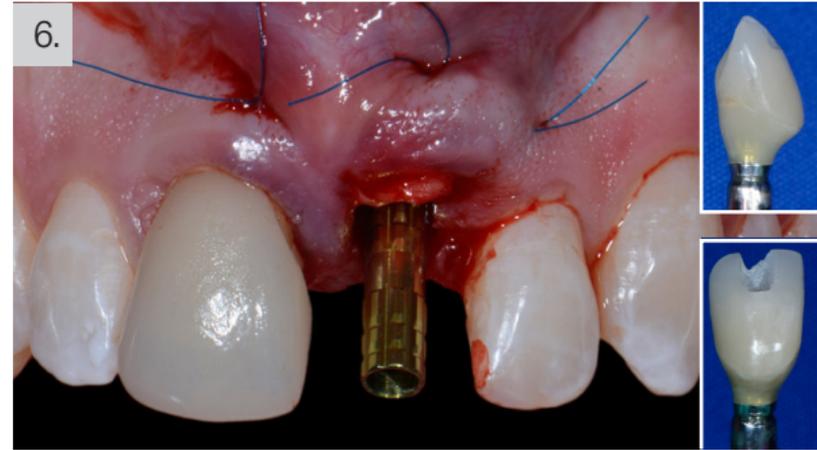
Tooth extraction minimizing the trauma to the hard and soft tissues. Tooth extracted showing the damage caused by the resorption of the dental tissue.



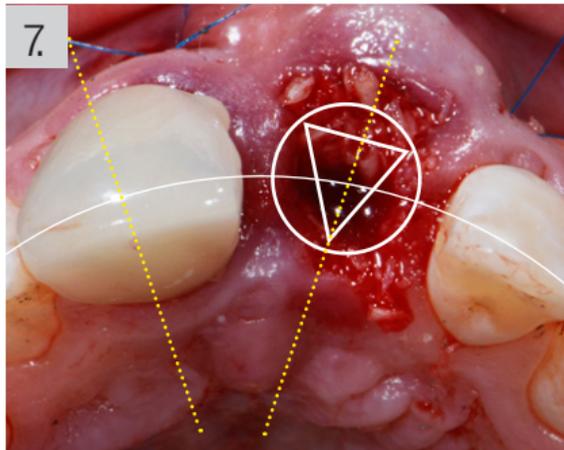
Soft tissue graft taken from the palate with design and stabilization of it (6-0 Prolene sutures) in the enveloped flap. V3 4.3 x 13 mm dental implant ready to be inserted in the fresh socket .



Final position of the V3 MIS dental implant showing a good mesio-distal and buccal-lingual position.



V3 provisional titanium abutment has been relined with flowable resin (Brilliant Everglow A2, Coltene) to transform his old crown into a screw retained provisional. Here, we have tried to shape the emergence profile by making a concave transition from the base of the abutment to the beginning of the margin of the crown.



7. Allograft bone (Raptos cortico-cancellou, Citagenix) has been packed firmly in place trying to overcompensate for graft contraction.

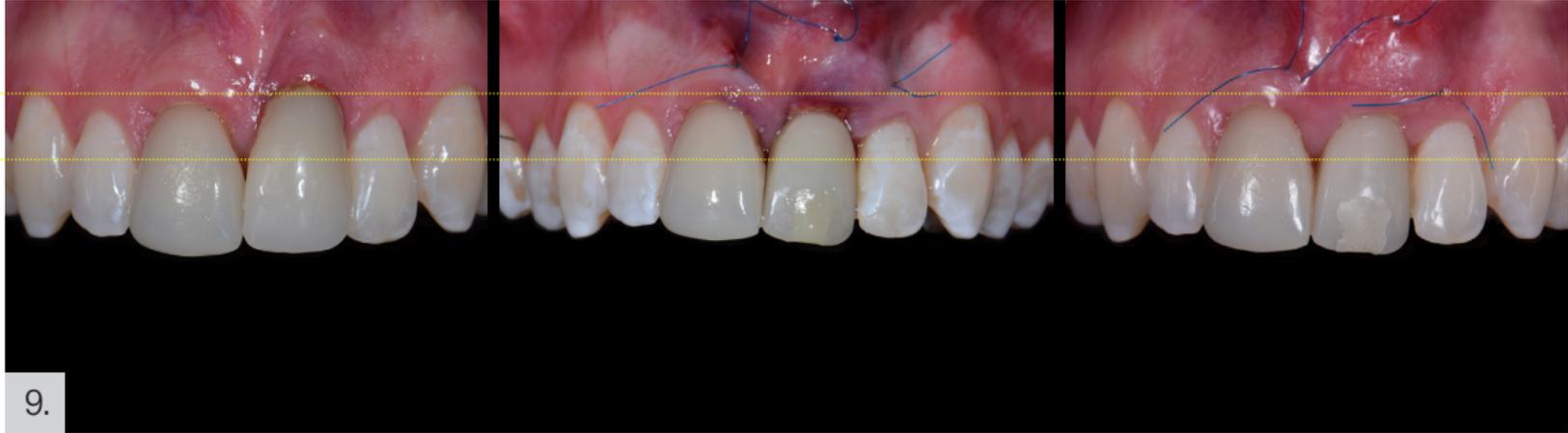


8. Final provisional restoration in place sealing the hard and soft tissue graft in place. Immediate RX establishing good position of the V3 dental implant, and in addition, final seating of our screw retained provisional restoration.

Initial

Immediate post op.

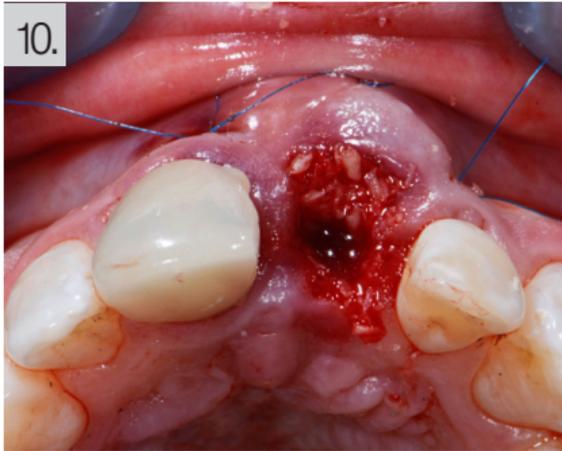
15 days post op.



9.

Progression of our case through 15 days, improvement on soft tissue dimensions establishing a wonderful biologic response.

10.



Initial

11.



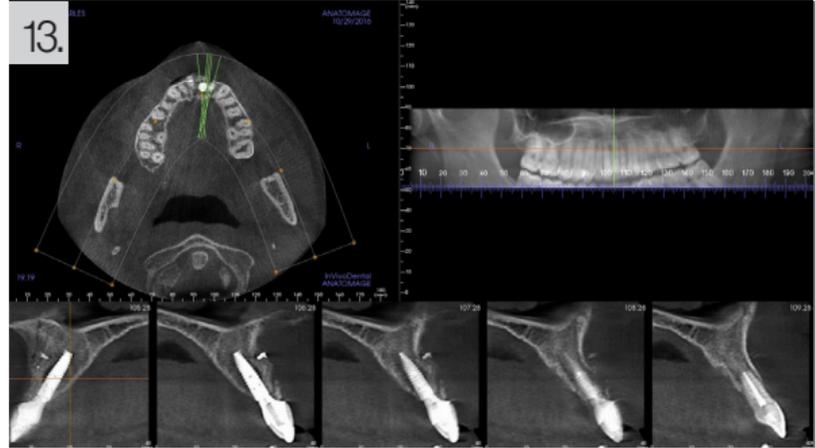
15 days post op.

12.



Matured soft tissue. We are ready to take final impressions on our 3 month follow-up.

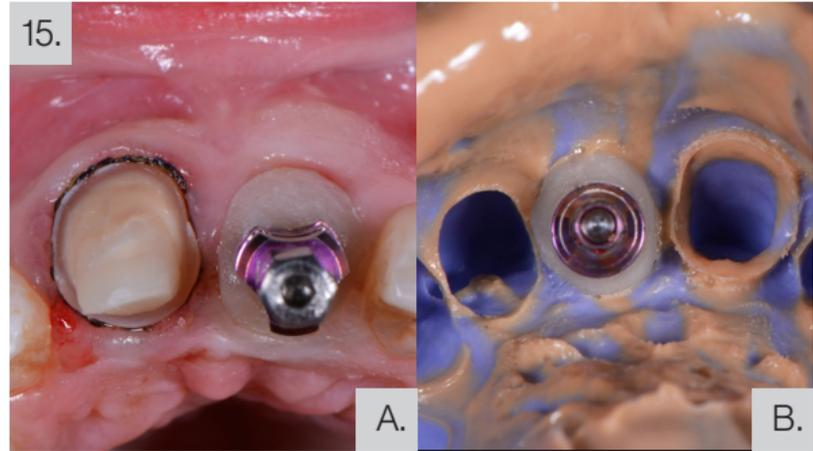
13.



3 month CBCT showing provisional restoration in place. Mature hard tissue at the implant-abutment connection.



Final crown preparation (Chanfer) for tooth #11 and personalized open tray transfer for our V3 dental implant (#21) with flowable composite resin (Brilliant Everglow, Coltene) coping the outline of the emergence profile.



A. Occlusal view of tooth preparations and personalized open tray transfer.

B. Final VPS impression (Silagum, DMG).

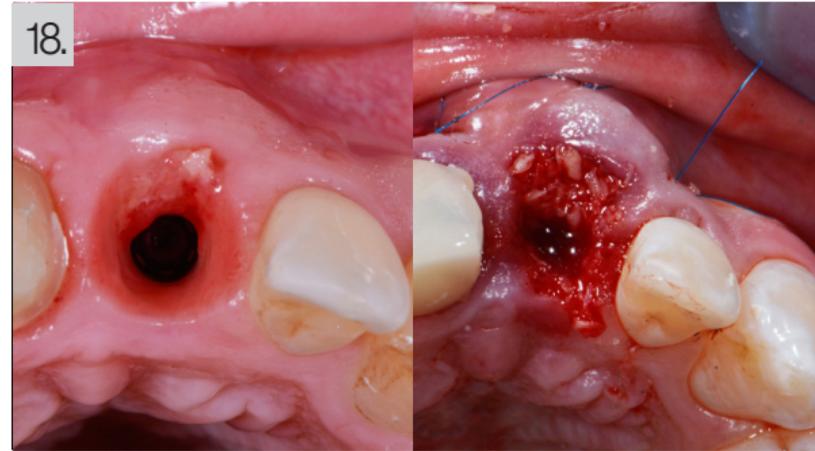
16.



Working cast model (Gelle's model) where the final lithium desilicated (Lisi, GC) abutment and crowns were fabricated.



Matured soft tissue of emergence profile with no collapse of the marginal tissue.



Occlusal view of emergence profile establishing the final contour of the buccal soft tissue. Overcompensated for hard and soft tissue contraction.

19.

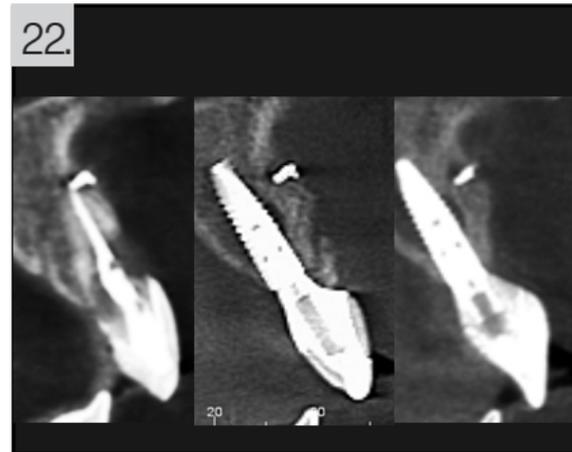


Final setting of the personalized lithium desilicated (Lisi, GC) abutment cemented over a V3 Ti-base.

20.



Dry test of final crowns



Initial

3 months

1 year

23.



Mimetic integration and stabilization of the soft tissue around the tooth and implant restorations. 1 year follow-up.