

Sinus elevation procedure using the Neoss ProActive Edge implant.

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Patient: 55-year old female.

Clinical situation: Upper right first molar removed due to fracture. Visible buccal bone resorption following three months of healing.

Treatment plan: Sinus lift procedure and guided bone regeneration to allow simultaneous placement of a Neoss ProActive Edge implant for restoration of the missing molar.



Figure 1

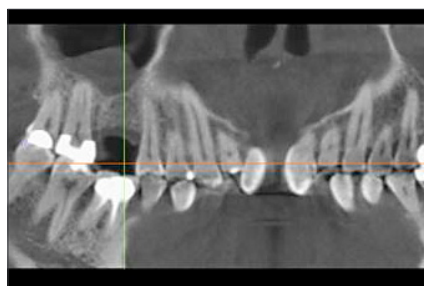


Figure 2

A female patient had the upper right first molar extracted due to tooth fracture. Buccal view after three months healing showed buccal resorption and stability of opposing dentition. (Figure 1).

The pre-treatment CBCT showed limited vertical height of the residual sinus floor. It also showed inflammation of the sinus lining due to a cold. (Figure 2).

Treatment plan for the patient was to perform a sinus lift procedure with guided bone regeneration to allow simultaneous placement of a Neoss ProActive Edge implant for restoration of the missing molar.

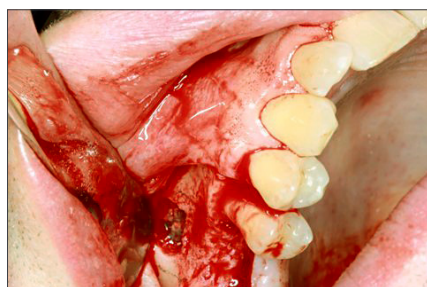


Figure 3



Figure 4

A buccal mucoperiosteal flap with a mesial relieving incision was performed. A lateral window was prepared using piezo surgery. The sinus membrane was elevated and kept intact (Figure 3).

The osteotomy was prepared according to Neoss ProActive Edge drill protocol (Figure 4) using a countersink to finish the coronal osteotomy preparation (Figure 5).



Figure 5



Figure 6

Xenograft material was placed in the lateral window and pushed to the palatal wall to help maintain the elevated sinus membrane (Figure 6).

A resorbable collagen membrane was placed on the sinus membrane floor (Figure 7).



Figure 7

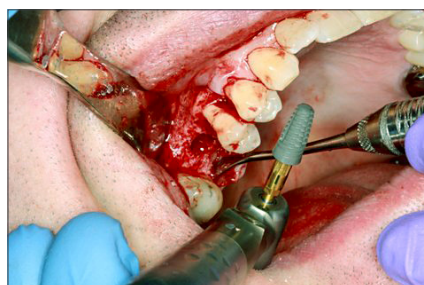


Figure 8

Placement of a Neoss ProActive Edge Ø5.0 × 11 mm implant (Figure 8-9). A final insertion torque of 25 Ncm was reached despite limited bone situation.

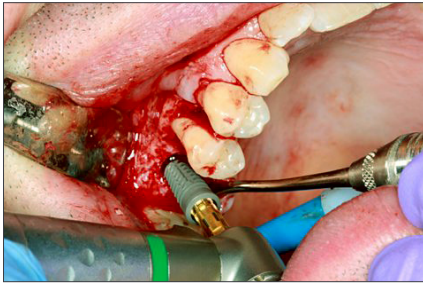


Figure 9

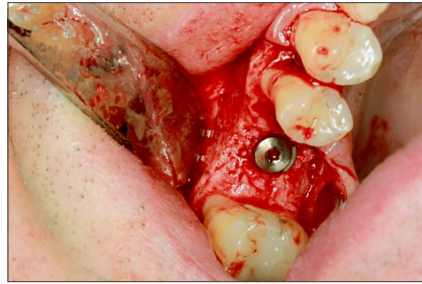


Figure 10

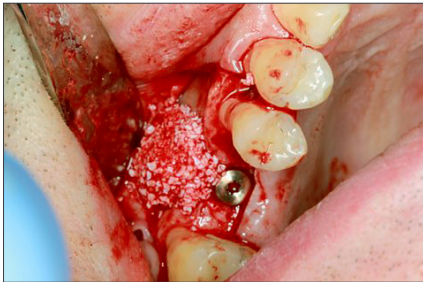


Figure 11



Figure 12

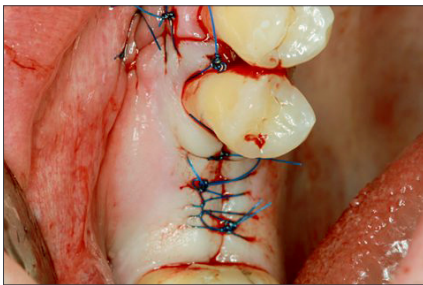


Figure 13



Figure 14



Figure 15

Placement of cover screw (Figure 10).

Further xenograft material was placed to fill the lateral window as well as to build out the bony architecture buccally (Figure 11), and a double layer of collagen membrane was placed over the graft (Figure 12).

Soft tissue closure with multiple non-resorbable sutures (Figure 13).

Ten months after implant placement, permanent prosthetic delivery (Figure 14) with stable bone levels (Figure 15).