

Important Numbers in Implant Dentistry

7 years

Treatment of a Compromized Maxilla Using MegaFix™ Implants Placed Simultaneously with Sinus Grafts; A 7-year follow-up

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Introduction

Restoration of a compromised maxilla is a challenging situation in implant dentistry. A poor bone quality of a maxillary posterior ridge, an increased volume of a maxillary sinus and vertical/ horizontal alveolar bone resorption make this type of treatment more complicated. For a predictable result, a clinician needs biologic/ physiologic knowledge, surgical and restorative skills and a reliable implant system.

The author describes a clinical case restored with MegaFix™ implants placed simultaneously with sinus grafts and its 7-year follow-up report.

Patient age/sex : 51Y, male

Clinical findings

- ▷ Failing natural tooth abutments of the maxillary molar area
- ▷ Severe maxillary alveolar bone loss
- ▷ Pneumatization of the right and left maxillary sinus

Preliminary treatments

- ▷ Extraction of hopeless teeth of the maxilla (#14 and #17)



Surgical Phase (1 month after extraction)

Seven MegaFix™ implants (Megagen, Korea) were placed in the maxilla simultaneously with sinus grafts



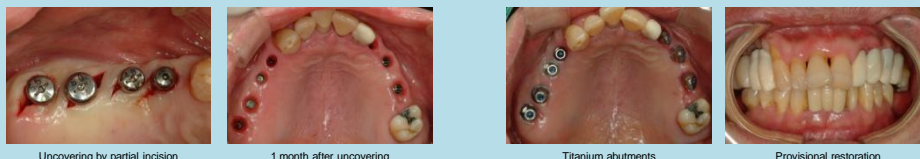
After flap elevation and lateral window formation, 1.5g of DBBM (Bio-Oss™, Geistlich) was grafted and 4 implants were placed in the right posterior maxilla. The insertion torque values were between 20 and 30Ncm. The implants were submerged for undisturbed healing.

The same surgical procedure were done for the left posterior maxilla. But due to the irregular sinus floor, the Schneiderian membrane was torn during detaching. A resorbable collagen membrane was placed to repair the perforation.



Uncovering, abutment connection and provisional Restoration

After 4 months, all implants were uncovered using oblique partial incision, which made the second stage surgery simple and easy. After another 1 month, titanium abutments were connected and provisional restorations were placed to restore the collapsed vertical dimension.



Final restoration

After 2 months of provisional period, the definitive restoration was fabricated and delivered. All implants were stable and the patient was satisfied with the result.



7-year follow-up

After 7 year of follow-up, all implants show good peri-implant bone and soft tissue. Currently, AnyOne™ implants were placed using computer-guided surgery and immediate loading (R2Gate System, Megagen) is in process to restore the right mandibular area.



Conclusion

MegaFix is an internal tapered connection implant system which can be successfully used to restore a complicated posterior maxillary area with minimal available bone and poor bone quality.