

Case Study

Sinus Augmentation with Puros Cortico-Cancellous Particulate Allograft Mix and Immediate Placement of a Zimmer[®] Trabecular Metal[™] Dental Implant into a Fresh Extraction Socket

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Pre-operative occlusal view shows a fractured maxillary left 1st molar.







Pre-operative periapical radiograph shows pneumatization of the sinus with a vertically resorbed residual ridge.







After tooth extraction, the facial plate is surgically exposed for subantral augmentation utilizing a lateral approach.







Access through the lateral sinus wall is performed utilizing the Sinus Lateral Approach (SLA) reaming instrument in a slow-speed handpiece.







After careful penetration through the lateral wall of the sinus, the reaming instrument is removed with the intact facial plate bone core.







Buccal view of the surgical site shows the Schneiderian membrane intact.



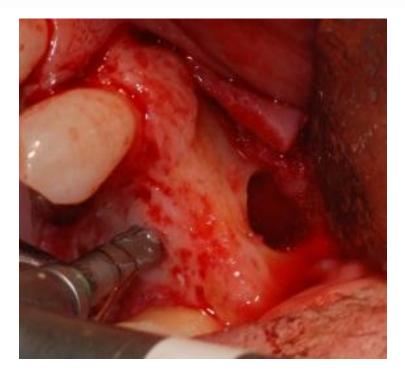




An elevator is used to carefully remove the Schneiderian membrane from the sinus floor for elevation prior to graft placement.



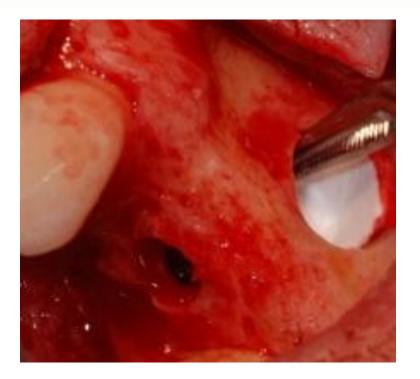




After mobilization of the Schneiderian membrane, the extraction socket is formed and enlarged to receive the implant by sequential cutting with internally irrigated drills and under copious external irrigation.







A *CollaTape®* Wound Dressing was used to isolate the membrane and allow the placement of the graft material.







Puros Cortico-Cancellous Particulate Allograft Mix is hydrated in sterile saline and bone, then gently packed into the sinus cavity.







A Zimmer[®] Trabecular Metal[™] Dental Implant, 4.7 mm x 10 mm, is placed into the osteotomy and graft material.







Zimmer[®] Trabecular Metal[™] Dental Implant in place.



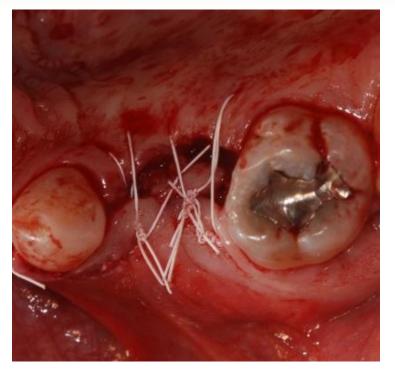




The bone core is replaced into its location in the facial plate and the surgical site is covered with a piece of *BioMend*[®] Absorbable Collagen Membrane.







Soft tissues are mobilized for tension-free closure and sutured in place.







Post-operative radiograph shows the *Trabecular Metal*[™] Dental Implant and sinus graft in place.







Healed site with submerged implant, three months post-operative







Implant uncovered and healing collar placed at four months







Final restoration, six months post-operative







Radiograph of *Trabecular Metal*[™] Dental Implant with final restoration, six months after placement

