

Tooth Extraction + Explantation in Conjunction with Simultaneous Alveolar Ridge Augmentation

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Patient History

A 65-year-old female with an unremarkable medical history presented with severe periodontitis and peri-implantitis affecting the mandibular molar region.

Process & Conclusion

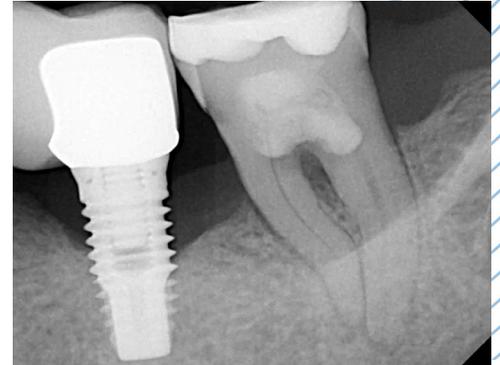
Tooth extraction and implant explantation were performed with simultaneous alveolar ridge augmentation to rebuild the compromised site. After 4 months of healing, the regenerated ridge showed excellent bone density and volume, allowing for successful implant placement.



Pre-operative view.



Pre-operative view.



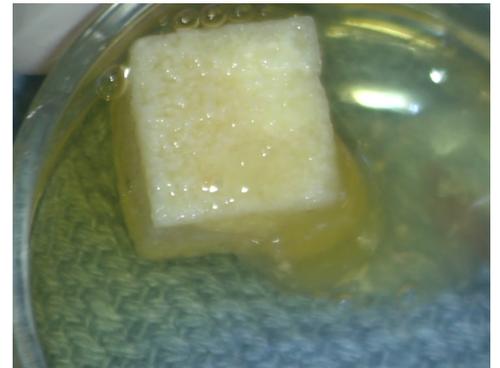
Pre-operative X-ray.



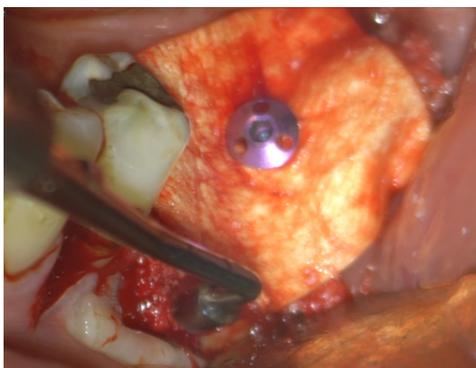
Severe periodontitis and peri-implantitis in the mandibular molar region, demonstrating advanced horizontal and vertical bone loss.



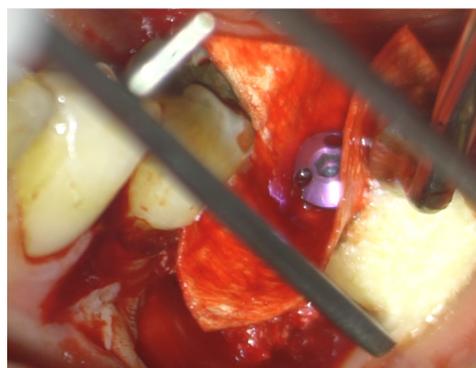
Following extraction of the affected tooth and explantation of the failing implant, a modular tenting screw was placed to re-establish vertical bone structure.



InterOss® Collagen blocks were hydrated with liquid platelet-rich fibrin (PRF) prior to placement; two blocks were used as the primary graft material.



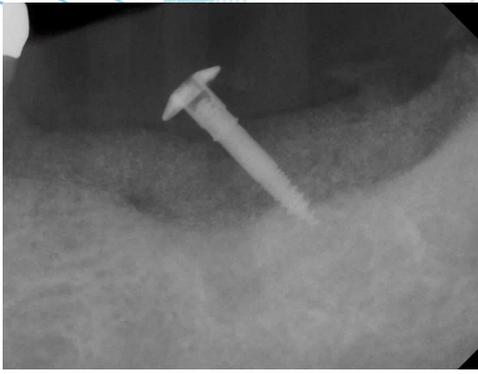
An InterCollagen® Guide membrane was adapted and secured to the tenting screw using a tenting cap.



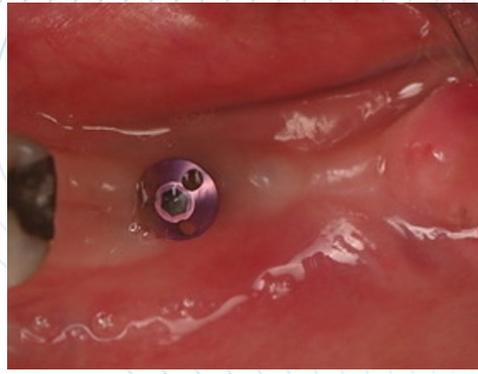
The hydrated collagen blocks were placed beneath the membrane to achieve adequate volumetric augmentation.



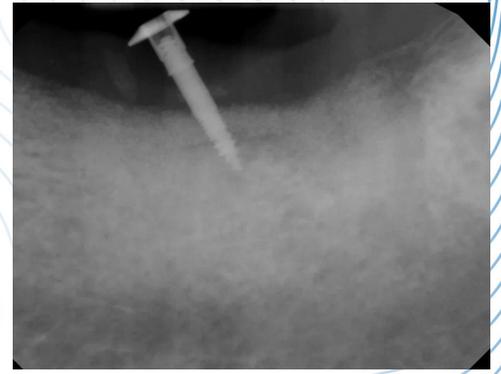
Primary closure was obtained through flap mobilization and stabilization using PTFE horizontal mattress sutures.



Immediate postoperative radiograph confirming correct positioning of the tenting screw and visualizing the low-density collagen scaffold.



At 4-month follow-up, soft tissue healing appeared uneventful, although partial exposure of the tenting screw was noted without signs of infection.



4-month postoperative radiograph demonstrating increased bone density, reconstitution of ridge morphology, and sufficient vertical bone height to permit implant placement.