RIDGE AUGMENTATION USING BOVINE-DERIVED XENOGRAFT PRIOR TO IMPLANT PLACEMENT IN THE ESTHETIC ZONE

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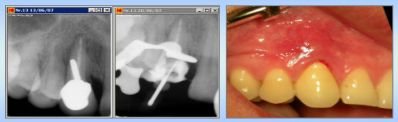
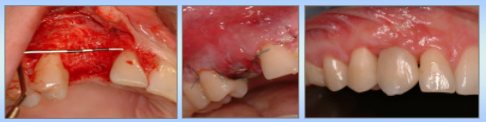
Objective: to demonstrate predictable implant esthetics after treatment of severe ridge defects by the use of bovine derived xenograft in combination with a resorbable collagen membrane.

For a long time autogeneous grafts have been the gold standard in the treatment of severe ridge defects for implant placement in the esthetic zone. However, autogeneous grafts require a second surgical harvesting site leading to greater morbidity of the patient.

Material & Methods: Severe ridge defects after tooth loss in the esthetic zone were treated by bovine derived xenograft in combination with a collagen membrane. Sixth months after augmentation implant(s) were placed. While maryland bridges served as temporary restorations during the surgical stage individually shaped resin crowns were positioned after reopening of the implant for the maturation of the gingival tissues. Ceramic abutments with full ceramic crowns were inserted three to six months later when ideal gingival emerging profiles had been achieved.





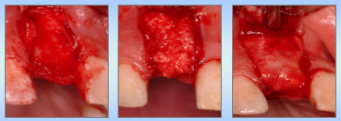
Cases #1 and #2 :
Tooth loss due to endodontic failure

Implant sites at baseline:
ridge reconstruction using Bio-Oss® Collagen bone mineral and Bio-Gide® bioresorbable barrier

Implant sites at 7 to 14 months:
different provisional crowns during soft tissue remodelling

Implant sites at 14 months:
setting of final restoration; cemented zirkonia single crowns

Implant sites at 18 months:
final outcome showing soft tissues surrounding implant restoration after two-stage reconstructive surgery


Conclusion: Predictable outcomes in implant treatment of severe ridge defects in the esthetic zone can be achieved by the only use of bovine derived xenograft in combination with a collagen membrane in a two stage procedure avoiding greater patient morbidity.
Soft tissue maturation supported by reshaping of temporary restorations for an ideal emerging profile is a key issue for esthetic success.

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