BioBrief

2-Stage Implant Placement in the Mandibular Canine Region Using the Sausage Technique™

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PATIENT
49-year-old healthy female

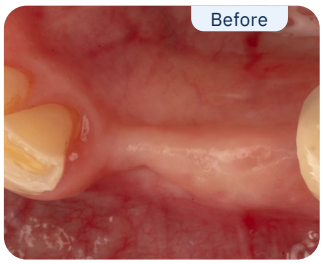
CHALLENGE
Significant discrepancy in bone dimensions compromising implant placement

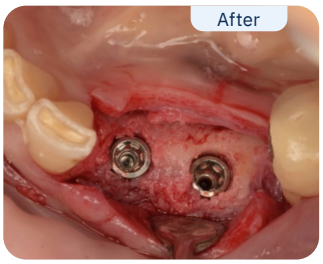
FOLLOW-UP
6 months

> "Geistlich Bio-Gide® Forte offers excellent handling, especially when fixed with pins as in the Sausage Technique™. It adapts seamlessly around pins and can be repositioned or stretched without folding or wrinkling."
>
> *Dr. Andrea Ravidà*

CASE HISTORY

A 49-year-old female patient presented for periodontal treatment and implant consultation. The 33-34 region exhibited a bounded tooth gap and pronounced horizontal ridge deficiency (Seibert Class I defect), compromising ideal implant placement. The final goal was to restore the site with dental implants after treatment of periodontal disease and guided bone regeneration to correct the horizontal discrepancy.



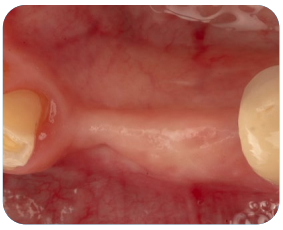


RISK ASSESSMENT

Patient	Esthetics	Soft Tissue	Bone	Infection	Adj. Teeth
healthy, non-smoker	moderate esthetic demand	compromised	reduced ridge width	chronic	restored
Low	Medium	High	High	Medium	High

PROCEDURE

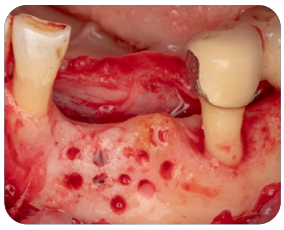
The treatment goal in this case is restoration of bone dimensions via guided bone regeneration and subsequent implant placement. The Sausage Technique™ was used for reconstruction of bone volume together with resorbable collagen membrane, fixation pins, and bone graft material.



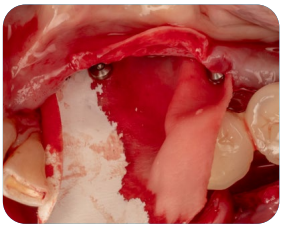
1 | Initial clinical presentation showing reduced ridge width.



2 | Pre-operative lateral view before flap elevation.



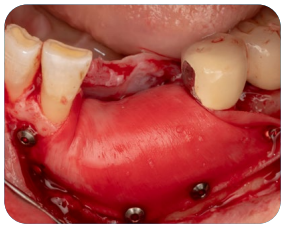
3 | Decortication is performed and the flap is mobilized.



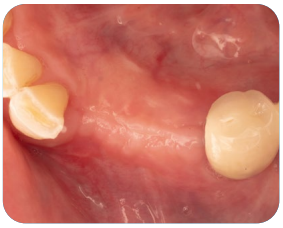
4 | Fixation of Geistlich Bio-Gide® Forte with pins was initiated on the lingual aspect.



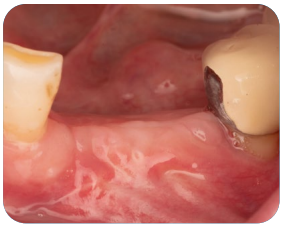
5 | The space beneath the membrane is filled with a 50:50 mixture of Geistlich Bio-Oss® and autologous bone.



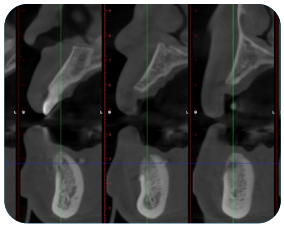
6 | The densely packed membrane is secured with pins on the buccal aspect (Sausage Technique™).



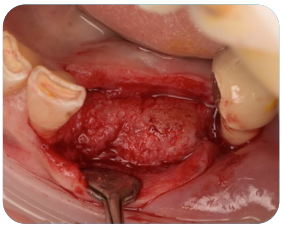
7 | Three-month follow-up shows visible horizontal bone gain and favorable soft-tissue conditions.



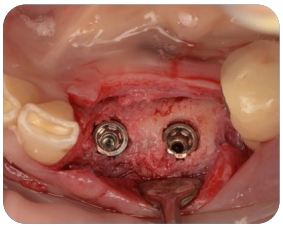
8 | Three-month lateral view demonstrating increased ridge width and favorable soft-tissue maturation following horizontal augmentation.



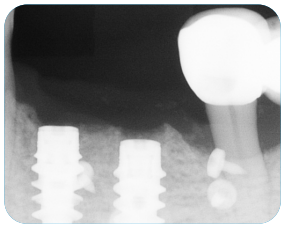
9 | Five-month CBCT cross-sections showing sufficient ridge width for implant placement.



10 | Six-month re-entry showing a stable, well-integrated graft ready for implant placement.



11 | Six-month occlusal view showing implant placement.



12 | Post-operative radiograph demonstrating the position of the implants.

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OUTCOME

Significant horizontal gain in bone volume was achieved utilizing guided bone regeneration with the Sausage Technique™ with Geistlich Bio-Gide® Forte resorbable collagen membrane, allowing for prosthetically driven implant placement.

KEY TAKEAWAY

Careful handling of flap and materials with good fixation of the bone graft and Geistlich Bio-Gide® Forte membrane is crucial for guided bone regeneration with the Sausage Technique™.

KEYS TO SUCCESS

- Primary closure and undisturbed healing through proper flap management and correct suturing techniques
- Selection of the appropriate bone grafting materials
- Proper fixation of membrane crucial for space maintenance and stability of grafted site
- Emphasizing patient compliance and ensuring regular maintenance visits to monitor and sustain long-term success