



# CONTOUR AUGMENTATION IN PERI-IMPLANT DEFECTS



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"Utilizing the L-shape technique with Geistlich Biomaterials can build ridge volume and imitate natural root prominence."

For buccal peri-implant defects in the esthetic zone, Geistlich Bio-Oss Collagen® provides the ideal material to build ridge volume in order to mimic natural root prominence. Geistlich Bio-Oss® particles and autogenous bone are applied to cover the peri-implant defects and then Geistlich Bio-Oss Collagen® is cut into an L-shape and adapted to the defect to provide volume contour. Geistlich Bio-Gide® is then placed to cover the defects and resorbable tacks are used to stabilize the membrane. With this technique, the peri-implant soft-tissue is supported and yields an optimally constructed contour. The addition of 10% collagen in Geistlich Bio-Oss Collagen® may contribute to stabilization of the blood clot and enhances the handling characteristics, holding the Geistlich Bio-Oss® particles together so they remain stable within the defect.

# **OBJECTIVES**

- · Repair peri-implant defects in the esthetic zone
- Increase ridge volume and provide soft-tissue support
- Achieve optimal ridge contour for an esthetic outcome



## CONCLUSION

- The use of biomaterials to correct peri-implant defects in the esthetic zone was successful in achieving adequate ridge volume
- Optimal ridge contour and soft-tissue support resulted in an esthetic outcome with the use of biomaterials



8 years post-operative

#### **CASE PRESENTATION**

Jaw	Region	Restorative Status	Gingival Biotype
☑ Upper Jaw	Anterior	☐ Tooth	Thick
☐ Lower Jaw	Posterior	<b>Implant</b> ✓	☐ Thin
Material Technique	• A combination of Geistlich Bio-Oss® particles and autogenous bone chips were applied to cover the defects, Geistlich Bio-Oss Collagen® was applied for volume contour and then Geistlich Bio-Gide® was placed over the graft and secured with resorbable pins.		
	2	3	
4		6	
7	8	IN ONE	

- 1 Initial situation before extraction of teeth #8 and #9. An apical fistula on tooth #9 is visible
- 2 After implant placement a small dehiscence defect was visible on the buccal aspect of implant site #8 and a large buccal bone dehiscence in region #9
- 3 In order to cover the implant surfaces, a mixture of autogenous bone chips from the surrounding area was combined with Geistlich Bio-Oss® particles
- 4 Preparation of Geistlich Bio-Oss Collagen® by cutting into an L-shape. The cutting process is easier when the material is wet
- 5 Occlusal view showing how Geistlich Bio-Oss Collagen® L-shape was used for contour augmentation in regions #8 and #9. Geistlich Bio-Oss® particles are used in addition to smooth the contour
- 6 The defect is covered with a Geistlich Bio-Gide® membrane, which is tacked and stabilized with two resorbable pins made of polylactic acid, placed at the apical part of the collagen membrane
- 7 After abutment connection with subsequent soft-tissue conditioning using screw retained temporary crowns, an excellent emergence profile was achieved 4 months after implant placement
- 8 A very natural appearance was achieved with two all-ceramic screw retained crowns with an optimal result for the ridge contour 8 years after crown insertion

**CAUTION:** Federal law restricts these devices to sale by or on the order of a dentist or physician.

#### Indications

Geistlich Bio-Oss® and Geistlich Bio-Oss Collagen® are indicated for the following uses: Augmentation or reconstructive treatment of the alveolar ridge; Filling of periodontal defects; Filling of defects after root resection, apicoectomy, and cystectomy; Filling of extraction sockets to enhance preservation of the alveolar ridge; Elevation of the maxillary sinus floor; Filling of periodontal defects in conjunction with products intended for Guided Tissue Regeneration (GTR) and Guided Bone Regeneration (GBR); and Filling of peri-implant defect in conjunction with products intended for GBR.

#### Warnings:

Possible complications which may occur with any surgery include swelling at the surgical site, flap sloughing, bleeding, local inflammation, bone loss, infection or pain. As Geistlich Bio-Oss Collagen® contains collagen, in very rare circumstances cases of allergic reactions may occur.

#### Indications

Geistlich Bio-Gide® is indicated for the following uses: augmentation around implants placed in immediate and delayed extraction sockets; localized ridge augmentation for later implantation; alveolar ridge reconstruction for prosthetic treatment; filling of bone defects after root resection, cystectomy, removal of retained teeth; GBR in dehiscence defects; and GTR procedures in periodontal defects.

#### Warnings:

As it is a collagen product, allergic reactions may not be totally excluded. Possible complications which may occur with any surgery include swelling at the surgical site, flap sloughing, bleeding, dehiscence, hematoma, increased sensitivity and pain, bone loss, redness, and local inflammation.

For more information on contraindications, precautions, and directions for use, please refer to the Geistlich Bio-Oss Collagen® and Geistlich Bio-Gide® Instructions for Use at: www.geistlich-na.com/ifu

# **MATERIAL SELECTION**

Geistlich Bio-Oss®

Geistlich Bio-Oss Collagen®

Geistlich Bio-Gide®

## FOR MORE INFORMATION

#### **Customer Care Toll-free 855-799-5500**

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