LEADING REGENERATION

Geistlich Biomaterials

Minor Bone Augmentation

Overview

Guided bone regeneration utilizing bone grafting materials and barrier membranes result in stimulating and directing the growth of new bone. Autologous bone and/or a biomaterial is placed into the defect and then a barrier membrane is applied on top of the graft to assist in wound-healing and prevent the ingrowth of soft-tissue.

Although effective in stimulating new bone formation, the resorption rate of an autologous bone graft is substantial over time. Due to their unique properties, Geistlich biomaterials bone substitutes offer a viable alternative by providing a stable scaffold for new bone formation and maintaining long-term volume preservation due to their low resorption rate.

The use of Geistlich Bio-Gide® in conjunction with a bone substitute provides undisturbed and significantly enhanced bone regeneration.[1,2] Geistlich biomaterials can be used successfully in cases with fenestration or dehiscence defects around implants.

Advantages of Utilizing Geistlich Biomaterials in Guided Bone Regeneration Procedures

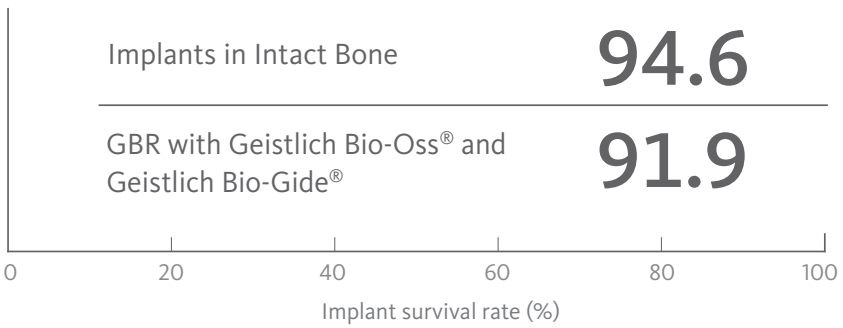
- Undisturbed bone regeneration[1,2]
- Reliable bone formation[3-8]
- Excellent osseointegration and long-term volume preservation[5,9,10]
- Long-term implant survival rate[11]
- Complication-free healing[12]
- Excellent esthetic outcomes[13]
- The extent of any future invasive surgery can be reduced

Numerous Studies Prove Excellent Long-Term and Stable Esthetic Results

After 12–14 years implants that were placed in bone augmented with Geistlich Bio-Oss® and Geistlich Bio-Gide® show the same survival rate as implants in native bone.[11]

91.9%

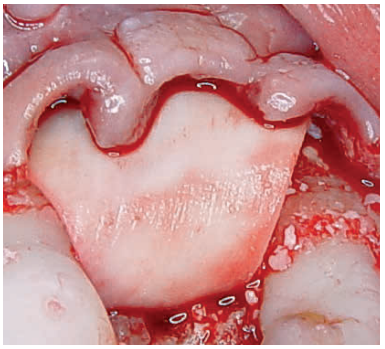
Implant survival rate after 12-14 years



Predictable Results

Excellent preservation of facial bone wall at 5 years.[4]

Implant treatment with no graft placement (peri-implant defect)



Contour augmentation of peri-implant defect after prior decontamination of the implant surface with Geistlich biomaterials

5 year result with good hard and soft-tissue contour

Case courtesy of: Prof. Dr. Anton Sculean Berne, Switzerland

Case Documentation

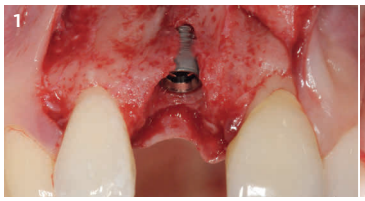
Geistlich Biomaterials

Peri-Implant Defects with Minor Bone Augmentation

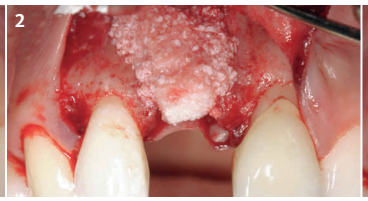
Dr. Ronald Jung, Zurich, Switzerland

Objectives

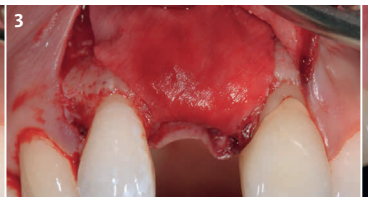
› Correct peri-implant defects in the esthetic zone
› Build buccal bone volume
› Mimic natural root prominence
› Support the peri-implant tissue to yield an optimally constructed contour
› Achieve long-term optimal esthetic results



1 After implant placement, a bone dehiscence associated with a one wall defect is observed in tooth # 8.



2 Geistlich Bio-Oss Collagen® is carefully applied. Geistlich Bio-Oss® is used in addition to round the edge.



3 The defect is covered with Geistlich Bio-Gide®.

4 At 10 months: optimal ridge contour is achieved.

Dehiscence Defects Around Implants

Prof. Dr. Daniel Buser, Berne, Switzerland

Objectives

› Obtain soft-tissue healing over 4–8 weeks, in order to achieve an intact soft-tissue covering
› Obtain the correct 3D position of the implant during and after implant placement
› Local contour augmentation in the facial region with autologous bone chips, Geistlich Bio-Oss® and Geistlich Bio-Gide®
› Primary wound closure with 6–8 week healing phase
› Esthetic restoration with screw-retained implant crown

1 Defect filled with autologous bone.

2 Contour augmentation is achieved with Geistlich Bio-Oss®.

3 The augmentation material is covered with Geistlich Bio-Gide® applied with a double-layer technique.

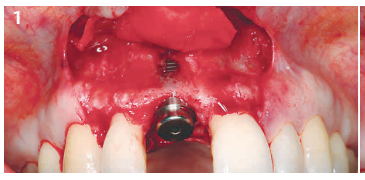
4 An optimal esthetic outcome and stable tissue height at 5 year follow-up.

Minor Bone Augmentation

Prof. K. L. Achermann, Filderstad, Germany

Objectives

› Esthetic restoration of tooth #8
› After implant placement the fenestration defect is treated with Geistlich Bio-Oss® and Geistlich Bio-Gide®
› Obtain functional and esthetic restoration



1 Bone loss showing apical implant threads.

2 Application of Geistlich Bio-Oss®.

3 Application of Geistlich Bio-Gide®.

4 Good healing of the hard and soft-tissue 13 months after surgery.

For additional information on **Minor Bone Augmentation,** please visit our website: **www.geistlich-na.com**

Geistlich
Biomaterials

Extraction Socket Management | **Minor Bone Augmentation** | Soft-Tissue Regeneration | Major Bone Augmentation | Sinus Floor Elevation | Periodontal Regeneration | Peri-Implantitis

Therapeutic Areas

At Geistlich Biomaterials, we are committed to developing treatments that are uniquely matched to the clinical situations you see every day. That's why we do more than bring you a family of products – we provide proven solutions in specific therapeutic areas.

The recommended Geistlich products below are the ideal biomaterials for use in **Minor Bone Augmentation** procedures.

Recommended Products for Minor Bone Augmentation

BONE SUBSTITUTES

Geistlich Bio-Oss®

Geistlich Bio-Oss Pen®

Geistlich Bio-Oss Collagen®

MEMBRANES

Geistlich Bio-Gide®

Geistlich Bio-Gide® Compressed

COMBINATION

Geistlich Combi-Kit® Collagen

The Ideal Geistlich Biomaterials for Minor Bone Augmentation

When used in combination, these proven and reliable products provide a foundation for long-term clinical success in regenerative dentistry.

Geistlich Bio-Oss® provides a stable scaffold for bone formation leading to long-term volume preservation, while Geistlich Bio-Gide® ensures undisturbed bone regeneration and prevents soft-tissue ingrowth.

For additional information about Minor Bone Augmentation, please visit the Dental Professional section of our website: www.geistlich-na.com

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

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

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