Geistlich

Clinical Perspective on Geistlich Bio-Oss Collagen®

Clinical Experience

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Clinical Studies and Cases

Dr. Waldemar Polido, DDS, MS, PhD

Dr. Ronald Jung, Prof. med. dent., PhD

Scheyer et al. 2016

SEE INSIDE!

- Treatment Overview
- Clinical Experiences
- Product Highlights



"When using Geistlich Bio-Oss Collagen° in our Dense Bone Protocol for extraction sockets, I routinely achieve high quality bone in my grafted sites demonstrated in our human histologic cores. Compared to other products I have used, Geistlich Bio-Oss Collagen° offers unique hemostatic and handling properties, along with stability in situ."

Product Highlights

- Unique Handling: Comprised of 90% Geistlich Bio-Oss® granules and 10% highly purified porcine collagen, Geistlich Bio-Oss Collagen® provides exceptional handling. It can be used in all bone augmentation and periodontal indications.¹
- Improved Outcomes: Geistlich Bio-Oss Collagen® was intentionally designed to stabilize the existing clot, yield faster bone regeneration and improved bone quality.²
- **Ease of Use:** Ability to adapt the material to the morphology of the defect and easily trim.











"Geistlich Bio-Oss Collagen* is the only graft material I use around immediate implants and helps me achieve incredible predictability and success."

Israel Puterman, DMD, MSDPeriodontist, Chevy Chase, MD



"Geistlich Bio-Oss Collagen" is a versatile biomaterial that can be used in various therapeutic indications. From alveolar ridge preservation to managing perimplant defects, it allows clinicians in different stages of their careers to achieve predictable clinical outcomes."

Irina Dragan, DDS, DMD, MS, eMBA Periodontist, Boston, MA



"Geistlich Bio-Oss Collagen" is an excellent product. It has changed my implant practice."

Collin M. Stutz, DDS, MD Oral Surgeon, Creve Coeur, MO See Handling:



Bone Grafting and Immediate Implant Placement

Dr. Waldemar Polido, DDS, MS, PhD Oral Surgeon, Indianapolis, IN,



Wei-Shao Lin, DDS, FACP, PhD, MBA Prosthodontist, Indianapolis, IN



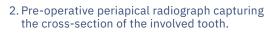
Objective: Immediate implant placement to replace unrestorable left maxillary first molar.

Conclusion: A one-year and a 3 year follow up show excellent clinical contour of the alveolar bone, and integration of the implant.

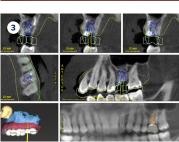








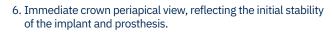
restoration alignment technique.





3. Comprehensive Digital Planning for Implant PlacementA multi-view CBCT and 3D reconstruction showcasing precise anatomical assessment and guided surgical approach.









7. Final crown occlusal view, illustrating the restoration's integration and final crown periapical view, emphasizing implant stability post-restoration.







"Immediate implant placement usually requires a bone graft to fill the gap between the implant and the socket walls. The use of bovine granules with the addition of porcine collagen (Geistlich Bio-Oss Collagen°) has demonstrated long-term stability to maintain alveolar contour and optimal bone level and soft tissue support around implants."

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Bone Augmentation L-Shape Technique with **Early Implant Placement**

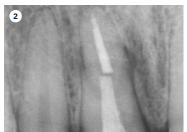
Dr. Ronald Jung, Prof. med. dent., PhD Periodontist, Zürich, Switzerland



Objective: Extract tooth 11 and replace it with an implant with guided bone regeneration. Augment the soft tissue, increasing the overall volume of site 11. Deliver a definitive reconstruction which is functional and esthetic.

Conclusion: The implant and prosthetic reconstruction were successful, providing the patient with adequate function and esthetics.





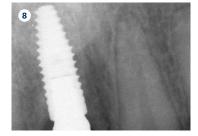












- 1. The patient presents with a severely discolored tooth that suffered trauma one year ago and shows signs of discomfort.
- 2. The tooth is root canaled, has a horizontal root fracture in the apical third and exhibits with a periapical lesion.
- 3. The tooth is carefully extracted and the socket is left to heal through unassisted healing. After 6 weeks a full thickness flap is elevated, a bone level implant is placed through a surgical guide. Notice the buccal dehiscence.
- 4. A Geistlich Bio-Oss Collagen° is trimmed to an "L-Shape" and is placed on the buccal-occlusal side of the implant.
- 5. To stabilize the grafted area the bone augmentation is covered with Geistlich Bio-Gide®, which is fixated apically with two resorbable pins.
- 6. Four months after implant placement a limited access "U"-flap was created and an implant impression was taken. The tissue was rolled to the buccal side and the abutment connection was performed. The flap is sutured with horizontal mattress and single interrupted sutures and primary closure is achieved.
- 7. The definitive reconstruction with layered zirconia was then fabricated and delivered to the patient. The clinical situation 5 month after implant placement shows a harmonious soft tissue and a well integrated implant crown. The patient is satisfied with the esthetic result.
- 8. The periapical radiograph taken at the one year follow-up shows stable marginal bone levels.

"By using Geistlich Bio-Oss Collagen" with an "L-Shape" covered with Geistlich Bio-Gide" a very stable horizontal and vertical bone volume around the implant is provided which results in a stable hard and soft-tissue."

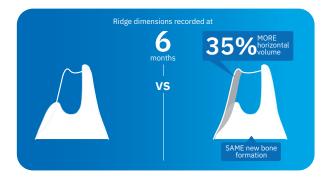
A Look at the Evidence

A randomized, controlled, multicenter clinical trial of post-extraction alveolar ridge preservation.*

Scheyer ET, Heard R, Janakievski J, Mandelaris G, Nevins ML, Pickering SR, Richardson CR, Pope B, Toback G, Velásquez D, Nagursky H.



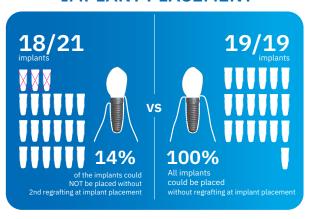
BONE FORMATION



SOFT-TISSUE HEALING



IMPLANT PLACEMENT



* Scheyer ET, Heard R, Janakievski J, Mandelaris G, Nevins ML, Pickering SR, Richardson CR, Pope B, Toback G, Velásquez D, Nagursky H. J Clin Periodontol. 2016 Dec;43(12):1188-1199. doi: 10.1111/jcpe.12623. Epub 2016 Oct 21

Study Goal: To compare the effectiveness of two ridge preservation treatments: Allograft and a cross-linked collagen membrane to Geistlich Bio-Oss Collagen° and Geistlich Bio-Gide°

Materials and Methods:

Forty subjects with extraction sockets showing substantial buccal dehiscences were enrolled and randomized across 10 centers. Treatments compared Oragraft* (demineralized allograft) with Biomend* Extend (cross-linked collagen membrane) versus Geistlich Bio-Oss Collagen* (deproteinized bovine bone mineral with collagen) with Geistlich Bio-Gide* (native, bilayer collagen membrane). Wound closure, soft tissue inflammation, and biopsies were analyzed at 6 months.

Results

Geistlich Bio-Oss Collagen*
& Geistlich Bio-Gide* provided better
soft tissue healing and ridge preservation
for implant placement. Deeper
extraction sockets with higher and
more intact bony walls responded
more favorably to ridge
preservation therapy.



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Your Partner in a Strong **Foundation**

Assurance

Your assurance, our long-term evidence. Scientifically proven in over 2,000 publications.

Proven Outcomes

Over 25 million successfully treated patients worldwide.3

Trustworthy

Every 14 seconds a Geistlich product is used.3

Geistlich Bio-Oss Collagen° is available in three sizes:

Product Number Quantity/Volume 500413 $50 \text{ mg} (\approx 0.1-0.15 \text{ cc})$ 20141 $100mg (\approx 0.2-0.3cc)$ 250mg (≈ 0.4-0.5cc) 20142 20143 $500mg (\approx 0.8-1.2cc)$

References:

- Jung, R. et al. (2013). Clin Oral Implants Res. 24(10):1065–73.
 Doillon CJ, Silver FH. Collagen-based wound dressing: Effects of hyaluronic acid and fibronectin on wound healing. Biomaterials 1986;7(1): 3-8.
- 3 Data on file, Geistlich Pharma AG, Wolhusen, Switzerland

For more information, please visit: www.geistlich.us

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

For more information on contraindications, precautions, and directions for use, please refer to the Instructions for Use at: dental.geistlich-na.com/ifu