# Geistlich Bio-OssCollagen®

### 2019

#### CLINICIAN PERSPECTIVES FROM:

Dr. Israel Puterman

Dr. Leonard Schiffman

Dr. John Parnoff

Dr. Collin Stutz

Dr. John Heldridge

Dr. Ueli Grunder

Prof. Dr. Ronald Jung

"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."

Dr. Alan Meltzer | Voorhees, NJ, USA

#### **SEE INSIDE!**

- Treatment Overview
- Clinical Experiences
- Product Highlights



### Clinical Corner

Our most valuable insights come from dedicated clinicians like you who make Geistlich Biomaterials part of their daily practice.

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

Dr. Israel Puterman Chevy Chase, MD, USA

success."



#### IN CLINICAL USE

Combining Geistlich Bio-Oss® with highly purified porcine collagen enhances its handling characteristics making Geistlich Bio-Oss Collagen® easy to manipulate and form to the defect.

"When hydrated and placed appropriately, Geistlich Bio-Oss Collagen® makes the procedure more efficient and predictable."

Dr. Leonard E. Schiffman Woodmere, NY, USA



"Geistlich Bio-Oss Collagen® is the ONLY graft material I use for extraction sockets."

Dr. John Parnoff New Haven, CT, USA





Occlusal view of the socket after tooth extraction. No flaps are raised around the affected area. A slight buccal bone defect was observed.



Filling of the extraction socket with Geistlich Bio-Oss Collagen® to the level of the palatal bone. Geistlich Mucograft® Seal is applied to facilitate soft-tissue formation and barrier functionality.



Flap elevation shows the healed bony situation 7.5 months after ridge preservation.



Situation with the final restoration 10 months after tooth extraction.

Prof. Dr. Ronald E. Jung | Zurich, Switzerland



## Geistlich Bio-OssCollagen°

#### **Product Highlights**

- > Consists of 90% Geistlich Bio-Oss® granules with the addition of 10% porcine collagen.
- > This innovation was intentionally designed to stabilize the existing clot at the defect site, leading to faster bone regeneration and improved bone quality.<sup>1</sup>
- The ability to adapt Geistlich Bio-Oss Collagen® allows for exceptional handling and ease of use.
- > Indicated in a wide variety of therapeutic areas:
  - Ridge Preservation
  - Minor Bone Augmentation
  - Periodontal Regeneration







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

Dr. Collin M. Stutz Creve Coeur, MO, USA



"Geistlich Bio-Oss Collagen® is by far, the best and most predictable graft material I have ever used."

Dr. John Heldridge Edmonds, WA, USA



### From 25 years experience . . .

## Contour Augmentation with Geistlich Bio-Oss Collagen®

Dr. Ueli Grunder | Switzerland



"I've been using Geistlich Bio-Oss Collagen® since 1991 and use it for all kinds of bone augmentation with the GBR technique. I obtain better results and speed up our procedure, due to its ease of use, which is essential for the success."

**Objective:** The upper premolar had to be removed due to an advanced periodontal disease and severe bone loss around the infected tooth. The bone defect was an intra-alveolar defect without dehiscence or fenestration.

**Conclusion:** A premolar grafted with Geistlich Bio-Oss Collagen® during implant placement showed good long-term results after 25 years. Satisfactory hard and soft tissue contours are present 25 years after implantation.



- 1. Pre-operative radiograph showing the severe bone defect around the tooth.
- 2. Six weeks after tooth extraction an uneventful soft-tissue healing in the post-operative phase is visible.
- 3. After flap preparation an implant was placed in a site with a severe bone defect.
- 4. In order to fill up the defect and provide volume stability Geistlich Bio-Oss Collagen® was applied.
- After augmentation with Geistlich Bio-Oss Collagen® the site was covered with a collagen fleece.
- 6. Final crown restoration after 6 months post-operative.
- 7. The radiograph after 25 years shows a stable bone situation.
- 8. The clinical picture after 25 years follow-up presents a stable bone and soft tissue situation.



### ... to new techniques.

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







"By using Geistlich Bio-Oss Collagen® trimmed into an "L-Shape" covered with Geistlich Bio-Gide® a very stable horizontal and vertical bone volume around the implant is provided. This results in a stable hard and soft-tissue condition following healing. This is key for the long-term performance of an implant especially in the esthetic zone."

**Objective:** The patient presented to the clinic with a discolored tooth #8, with mobility and a history of trauma. The tooth has a horizontal fracture in the apical third of the root and has recurrent infection after the root canal treatment. The patient feels discomfort and dislikes his esthetic appearance. He would like the fractured tooth #8 removed and replaced with a fixed solution.

**Conclusion:** The implant and its prosthetic reconstruction were successful because they provided the patient with a fixed solution with adequate function and esthetics. The implant shows stable marginal bone levels due to the proper implant placement together with the guided bone regeneration procedure. The peri-implant soft-tissue is healthy and stable with sufficient volume created by the soft-tissue augmentation. The definitive reconstruction meets the patient's esthetic demands and is functional in occlusion.



- 1. The tooth has had root canal treatment, has a horizontal root fracture in the apical third and exhibits with a periapical lesion.
- 2. The tooth is carefully extracted and the socket is left to heal through unassisted healing.
- After 6 weeks a full thickness flap is elevated with a distal releasing vertical incision. A bone level implant is placed according to the prosthetic plan through a surgical guide. Notice the buccal dehiscence.
- 4. Geistlich Bio-Oss Collagen® is trimmed to an "L-Shape" and is placed on the buccal-occlusal side of the implant. Additional Geistlich Bio-Oss® granules are placed around the remaining gaps.
- To stabilize the grafted area the bone augmentation is covered with Geistlich Bio-Gide®, which is fixated apically with two resorbable pins.
- 6. The flap is sutured with horizontal mattress and single interrupted sutures and primary closure is achieved.
- 7. The definitive layered zirconia crown was fabricated and placed. The clinical situation 5 months after implant placement, shows 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.



Geistlich Bio-Oss Collagen® contains 90% small Geistlich Bio-Oss® granules and 10% porcine collagen. The addition of collagen improves the handling capabilities and the Geistlich Bio-Oss® granules provide the scaffold for reliable bone formation.

#### Geistlich Bio-Oss Collagen® is available in three sizes:

Product Number	Quantity/Volume
20141	100mg (≈ 0.2-0.3cc)
20142	250mg (≈ 0.4–0.5cc)
20143	500mg (≈ 0.8–1.2cc)



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

#### Indications

Geistlich Bio-Oss Collagen® is indicated for the follow-ing 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 defects 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.

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

1 Doillon CJ, Silver FH. Collagen-based wound dressing: Effects of hyaluronic acid and fibronectin on wound healing. Biomaterials 1986;7(1): 3-8.

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