



Periodontitis

The Importance of Saving Teeth

leading regeneration

Geistlich

Periodontitis: An Underestimated Condition

This is Why You Should Care

Periodontitis is the sixth-most prevalent condition in the world^{1,4} with a prevalence of 45–50%, making it the most common chronic inflammatory non-communicable human disease.^{2,4}

According to the Global Burden of Disease 2014 study, the prevalence of severe periodontitis was estimated at 7.4%.¹ In addition, more than two-thirds of the population worldwide was found to be affected by gingival recessions, which translates into 78% of global prevalence.³

Helping patients affected by gingival recessions, gingivitis, and/or periodontitis to create and maintain good oral health, function, and esthetics is the goal of every dentist and dental hygienist. To accomplish this, various therapeutic approaches have been developed based on the grades of severity of periodontitis.

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Gingivitis is the mildest form of periodontal disease and affects only the soft tissue of the gums. Although the symptoms are very mild, it's important to diagnose gingivitis in order to prevent periodontitis. If left untreated, it can lead to additional gum recession, bleeding, and pain while brushing.

Gingivitis can cause various symptoms such as:

- Swollen or red gums
- Bleeding gums when brushing / flossing
- Bad breath caused by bacteria

Gingivitis⁵



Periodontitis⁵

Untreated gingivitis can progress to periodontitis, which is a more serious condition that involves the periodontium, the bone, and soft tissues. It can lead to severe inflammation, infection, and damage to gums and teeth due to plaque and bacterial infection below the gumline.

Periodontitis can cause various symptoms such as:

- Receding gums
- Tooth sensitivity
- Loose teeth



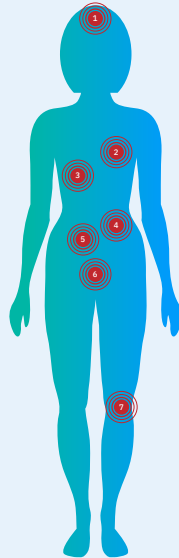
Dr. Christina Tietmann
Aachen, Germany

Periodontitis Associated with Systemic Diseases

Oral health is a functional, structural, esthetic, physiological, and psychological state of wellbeing and is essential to everyone’s general health and quality of life.⁶⁻⁸ In recent years, several studies have reported associations between periodontitis and a number of systemic diseases, and vice versa.⁶⁻⁸

Both acute local and systemic inflammatory response is increased up to 24-48 hours after periodontal treatment, either surgical or non-surgical. Because this might be additional to the pre-existing inflammatory burden of patients with compromised medical history and/or uncontrolled systemic diseases, some attempts have been made to investigate how to manage and modulate the impact of periodontal treatment on systemic inflammation.⁸

- 1 Neurological diseases e.g. Alzheimer’s disease
- 2 Chronic respiratory diseases e.g. aspiration pneumonia
- 3 Cardiovascular diseases
- 4 Cancer e.g. colorectal cancer
- 5 Gastrointestinal diseases, diabetes & insulin resistance
- 6 Pregnancy complications
- 7 Rheumatoid arthritis



How the effect of periodontal treatment on systemic inflammation can be reduced

It has been observed that treatment time is one of the factors that is associated with systemic response.⁸ Thus, in subjects with complex medical histories and/or uncontrolled comorbidities, a conventional treatment approach and shorter appointments should be preferred in order not to cause an intense systemic inflammatory reaction.⁸ When antibiotic prophylaxis and other preparations are required prior to treatment, reducing the total number of appointments should be considered.⁸ Therefore, after carefully assessing their medical history, patients must receive a tailored treatment plan and, more importantly, set up an adequate periodontal maintenance plan like regular recall intervals and instructions.⁸

“The EFP guidelines provide evidence-based therapeutic pathways tailored to individual patient diagnoses, ensuring the best possible treatment outcomes. For patients, this means receiving high-quality, standardized care that improves periodontal health and overall quality of life.”

The Importance of Saving Teeth

Regular periodontal treatment is essential for maintaining good oral health and preventing more serious dental problems in the future.

1. **Reduction of systemic inflammation**
Saving teeth by means of periodontal treatment lowers the risk of systemic inflammation, which can affect your patients’ overall health.⁶⁻⁸
2. **Better quality of life**
Patients reported better quality of life for up to 10 years after periodontal treatment compared with patients with implants and/or bridge restoration.⁴⁶
3. **Long-term tooth retention**
Saving teeth for as long as possible – especially in younger patients – is one of the main goals of periodontal treatment.
4. **Saves money**
Periodontal treatment was a less costly alternative to tooth extraction and replacement over a period of 10 years.⁴⁶

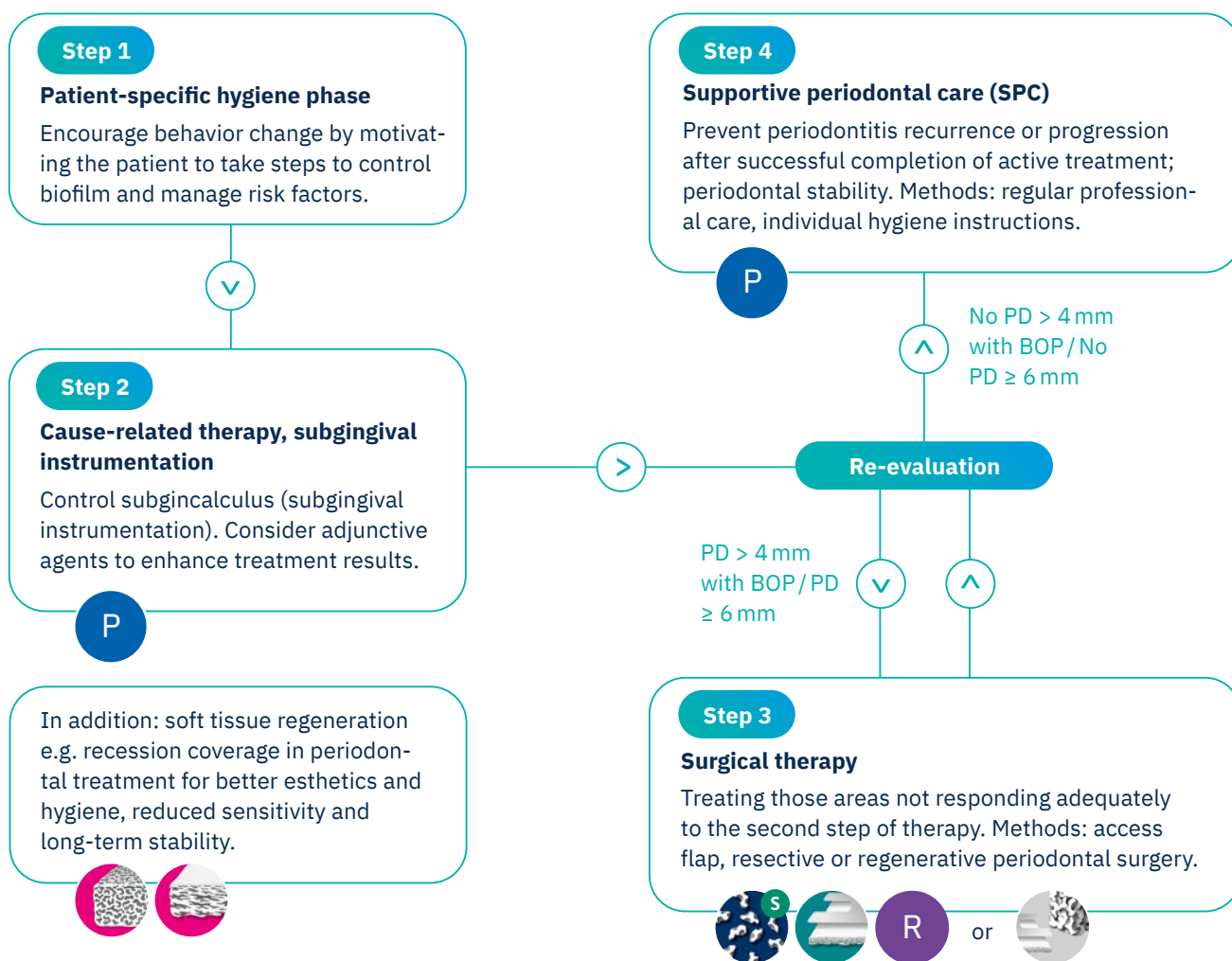
Periodontal Treatment with Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® Perio achieves an overall tooth survival rate of 97% after 5-10 years.^{*34}

*Cohort study: 1008 intrabony defects (176 patients) treated with Geistlich Bio-Oss® Collagen with Geistlich Bio-Gide® Perio (in 50% of the cases), plus enamel matrix derivative in <10% of the cases.

Your Solutions for Every Stage of Your Treatment

The management of periodontitis begins with a patient-specific diagnosis that considers the disease's severity (stage) and various biological factors (grade). The diagnosis forms the basis of a personalized treatment protocol, which is thoroughly discussed with patients to ensure their understanding and agreement, highlighting the importance of their commitment to the

process. Patients are educated about their condition, the potential causes, and the various treatment options available, including the implications of opting out. The goal is to provide a comprehensive, patient-centered approach to managing periodontitis. The treatment journey can be described in 4 steps according to EFP/S3 guidelines:^{9,10}



Geistlich Bio-Oss®



Geistlich Bio-Gide® Perio



REGENFAST®



Geistlich Perio-System Combi Pack



Pocket-X® Gel



Geistlich Mucograft®



Geistlich Fibro-Gide®



Ready for the Next Step?

1 Learn



Learn more about Periodontitis:



2 Try



Try out our products:



3 Buy



Buy our products here:



Your Geistlich Biomaterials



Geistlich Bio-Oss® Geistlich Bio-Gide® Perio

Geistlich Bio-Oss® is the leading natural bone substitute in regenerative dentistry worldwide.^{11,12} With its osteo-conductive properties Geistlich Bio-Oss® particles become an integral part of the newly formed bone and preserve volume over the long-term.¹³⁻¹⁶ Geistlich Bio-Gide® Perio is a collagen membrane possessing the same biological properties as Geistlich Bio-Gide® with two modified attributes: a firmer upper surface that facilitates cutting when dry, eases application in guided tissue regeneration during surgery and retains its structural integrity even when wet.¹⁹⁻²¹ Both products are used in the most varied indications, including ridge preservation, minor bone augmentation, and periodontal regeneration.^{17,18}

Geistlich Bio-Oss®

Small granules 0.25-1 mm

0.25 g ~ 0.5 cc / 0.5 g ~ 1 cc

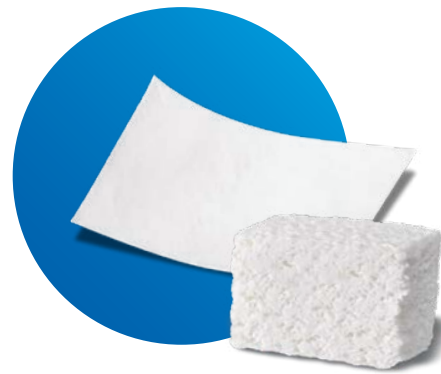
1 g ~ 2 cc / 2 g ~ 4 cc

Large granules 1-2 mm

0.5 g ~ 1.5 cc / 1 g ~ 3 cc / 2 g ~ 6 cc

Geistlich Bio-Gide® Perio 16 × 22 mm

with four sterile templates



Geistlich Perio-System Combi-Pack

Perio-System Combi-Pack combines the improved handling attributes of Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® Perio. Used together, they offer optimal properties for regenerative periodontal procedures: Geistlich Bio-Oss® Collagen is easy to form and handle due to 10% of porcine collagen, and Geistlich Bio-Gide® Perio offers easy handling due to its firmer upper surface that eases cutting when dry, and eases application during surgery.¹⁹⁻²¹

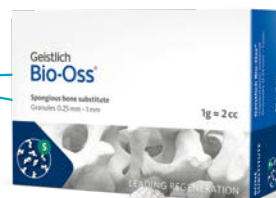
**Geistlich Bio-Gide® Perio 16 × 22 mm together with
Geistlich Bio-Oss® Collagen 100 mg**



REGENFAST®

REGENFAST® is the first viscoelastic gel in dentistry to harness the power of polynucleotides and hyaluronic acid, promoting faster bone formation and stimulating tissue repair.^{23,24,49} REGENFAST® can be used in combination with autologous bone, bone substitutes, membranes, and matrices.^{23,24}

0.3 ml, 0.6 ml





Geistlich Mucograft®

Geistlich Mucograft® is a collagen matrix designed specifically for soft-tissue regeneration in the oral cavity.³⁶ It is indicated for gaining keratinized tissue³⁷⁻³⁹ and for recession coverage.^{40,41}

Geistlich Mucograft® provides an alternative to autologous soft-tissue grafts.³⁷⁻⁴¹ Painful harvesting of tissue is avoided, benefiting patients and clinicians alike.⁴²

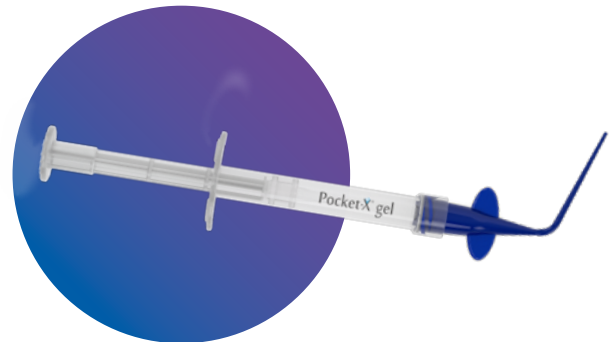
15 × 20 mm
20 × 30 mm
30 × 40 mm



Geistlich Fibro-Gide®

Geistlich Fibro-Gide® is a porcine, porous, resorbable and volume-stable collagen matrix, specifically designed for soft-tissue regeneration.^{25,28,34} The collagen matrix is made of reconstituted collagen and undergoes smart chemical cross-linking to improve its volume stability while maintaining good biocompatibility.²⁵⁻³⁴ Geistlich Fibro-Gide® is the alternative to autogenous connective tissue grafts (CTG), which are considered the gold standard in regenerative soft-tissue procedures.^{27,29,30,35}

15 × 20 × 6 mm / 20 × 40 × 6 mm
15 × 20 × 3 mm / 20 × 40 × 3 mm



Pocket-X® Gel

Pocket-X® Gel is an adjunctive subgingival treatment to improve the healing of the gingiva and to inhibit bacterial recolonization in the periodontal pocket.^{43,44} It can be part of a routine periodontal treatment program in cause-related therapy and supportive periodontal care (steps 2 and 4).⁴³⁻⁴⁵

0.1ml, 3 syringes



Intrabony 2-Wall Defect: Interproximal Crater



Dr. Frank Bröseler,
Germany

“I completely trust in the properties of Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® and can focus entirely on the procedure.”

Initial Situation

Functional and esthetic reconstruction in chronic periodontitis with deep intrabony defects.

Final Result

After controlling the periodontal disease, this guided tissue regeneration technique leads to a long-term stable bony situation with pleasant soft-tissue appearance.



My Advice

- > Geistlich Bio-Gide® is perfect for intrabony defects, as it remains securely in place within the defect area without shifting or drifting away. It adapts perfectly to the wound site so you don't need to worry about any dislocation of the membrane.
- > When using Geistlich Bio-Gide®, I almost never see inflammatory reactions in the surgical area. The membrane's high biocompatibility promotes wound healing, giving me an added sense of security.

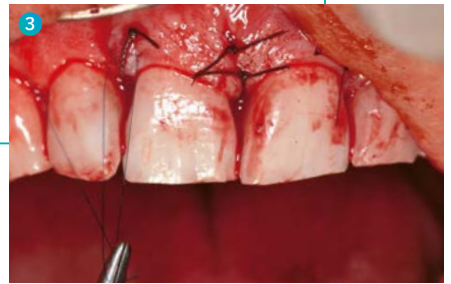




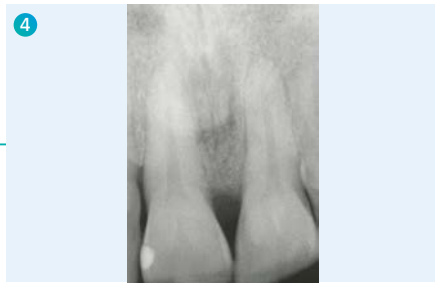
1
Intrasurgical situation after preparation of the mucoperiosteal full-thickness flap reveals deep osseous defect.



2
The grafted site is covered with Geistlich Bio-Gide® Perio.



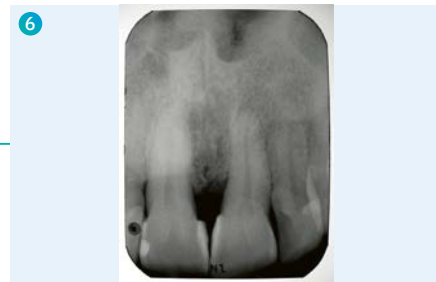
3
The flap is repositioned and sutured to relieve flap tension and obtain primary closure of the interdental space.



4
Postoperative x-ray control after regenerative procedure using Geistlich Bio-Oss® Collagen.



5
Clinical situation at 3-year follow-up.



6
4.5-year post-op radiograph showing sustained defect fill from Geistlich Bio-Oss® Collagen.

Geistlich Bio-Oss® Collagen



Geistlich Bio-Gide® Perio



Used Products

2-Wall Defect in the Esthetic Zone



Dr. Beat Wallkamm,
Switzerland

“Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® Perio are the perfect combo for minimally invasive surgical technique in periodontal 1 or 2-wall defects.”

Initial Situation

Periodontal regeneration with a minimally invasive surgical technique in combination with Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® Perio.

Final Result

The minimally invasive surgical technique in combination with Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® Perio resulted in markedly improved clinical and radiographic outcome.



My Advice

- > Patients' compliance is key: maintaining good oral hygiene, ideally non-smoker, and reliable.
- > For successful treatment, the site must have a vertical bone defect ≥ 3 mm and a favorable mucogingival situation.
- > The surgeon should be trained for these surgeries and use instruments for microsurgical procedures.

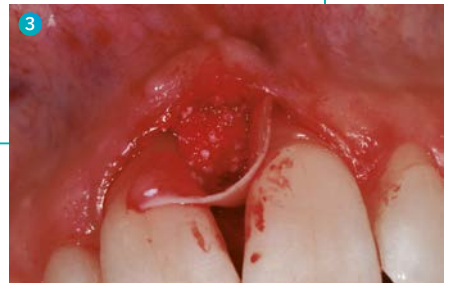




1
Baseline radiograph shows the bone loss mesially to the first right incisor reaching the apical third of the root.



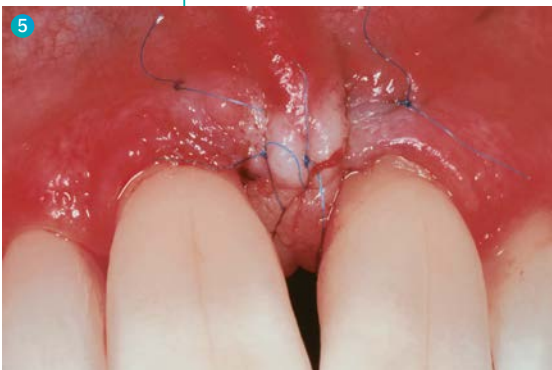
2
After elevation of a tiny buccal flap and positioning of the interdental papilla slightly to the palatal side, the defect is debrided.



3
A trimmed Geistlich Bio-Gide® Perio is inserted palatinal and Geistlich Bio-Oss® Collagen is applied into the defect.



4
The Geistlich Bio-Gide® Perio is folded over the augmented site and inserted under the buccal full thickness flap.



5
Primary closure of the wide interdental papilla is obtained with an internal mattress suture with an external loop and two oblique hang-up mattress sutures.



6
6 weeks after surgery, the inter-dental soft tissues are well healed.

Geistlich Bio-Oss® Collagen



Geistlich Bio-Gide® Perio



Used Products

Treatment of a Premolar Periodontal Defect in the Furcation Area



Dr. Philippe Doucet,
Paris, France

“I use REGENFAST® because of its interesting composition and the ability to promote wound healing, which is pivotal in periodontal regeneration.”

Initial Situation

A 46-year-old patient presents with generalized periodontitis in stage 2, grade B. Tooth 15 is missing. Secondary migrations in the maxillary anterior region have been appearing for several months. After initial periodontal therapy, pockets of more than 6 mm with bleeding upon probing persist on teeth 25, 42, and 43. Regenerative surgeries are scheduled for both sites. A periodontal regeneration technique is applied to treat the infra-osseous lesion present mesially and palatally on tooth 25.

Therapeutic Approach

An exclusively palatal full-thickness flap is prepared from the distal side of tooth 26 to the mesial side of tooth 24, taking care to preserve the papillae. A palatal relief incision of 3 mm is made on the mesial side of tooth 24. After debridement of the granulation tissue and careful exposure of the intraosseous lesion, a mixture of Geistlich Bio-Oss® and REGENFAST® is placed in the bone defect, without membrane. Vertical mattress sutures are placed in the interdental spaces.

Final Result

The aim of the treatment is to reduce the pocket depth. The favorable morphology of the bone defect makes it possible to reduce the pocket depth using a tissue regeneration technique. The use of a bone xenograft allows creating a matrix that promotes osseous colonization of the defect from the bone margins of the defect. Its combination with REGENFAST® is designed to potentiate this osteoconductive phenomenon and accelerate mucosal healing.



My Advice

- > Effective initial therapy
- > Excellent plaque control
- > Management of risk factors
- > Suitable morphology of the bone defect
- > Minimum flap management with papilla preservation.





1 Full-thickness flap with mesial palatal relief incision of 3 mm and papilla preservation. Debridement of the lesion and exposure of the intra-osseous defect reaching the furcation zone.



2 The papilla at the level of the defect is preserved in its entirety.



3 Treatment of the defect with a mixture of Geistlich Bio-Oss® and REGENFAST®.



4 Vertical mattress sutures at the papilla level and O-sutures at the level of the relief incision.



5 Suture removal 15 days after surgery.



6 Clinical aspect after 6 months, vestibular view.



7 Clinical aspect after 6 months, palatal view.

Geistlich Bio-Oss®



REGENFAST®



Used Products

REGENFAST® in the Treatment of Infrabony Defects



Dr. Francesco Cairo,
Florence, Italy

“The goal was to resolve the infraosseous defect in order to improve the long-term prognosis.”

Initial Situation

The present patient (65 yrs old, male, non-smoker) showed stage IV, grade C, generalized periodontitis. After causal related therapy, residual pockets were scheduled for periodontal surgery. At that time, periodontal regeneration with REGENFAST® and Geistlich Bio-Oss® at central incisor was scheduled.

Periodontal regeneration is the treatment of choice for residual infrabony defects according to international guidelines.

Therapeutic Approach

Periodontal flap surgery including simplified papillary preservation was performed. After gentle debridement of infrabony defects, REGENFAST® was applied over the exposed root and in combination with Geistlich Bio-Oss® small granules. Care was then taken to obtain primary soft tissue closure to improve healing with probing depth reduction.

Final Result

To treat the residual pocket associated with a deep, non-containing infrabony defect, REGENFAST® mixed with Geistlich Bio-Oss® small granules in combination with papillary preservation flap. One year after surgery the clinical and radiological result shows an optimal treatment outcome for the defect.



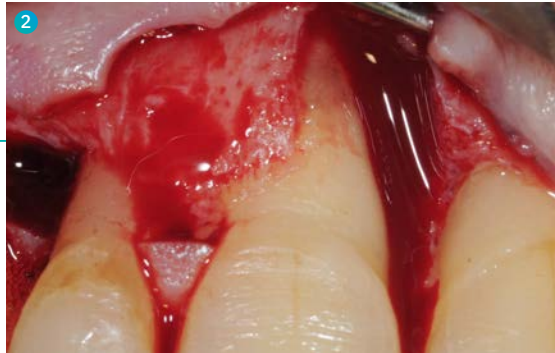
My Advice

- > Successful causal related therapy
- > Proper flap management for periodontal regeneration
- > Efficacy of REGENFAST® mixed with Geistlich Bio-Oss® small granules
- > Excellent patient compliance

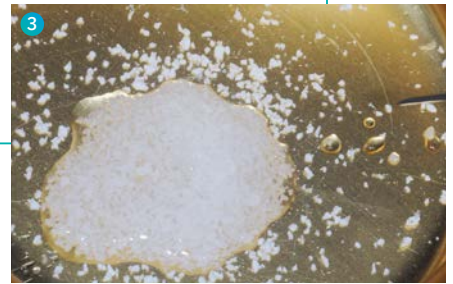




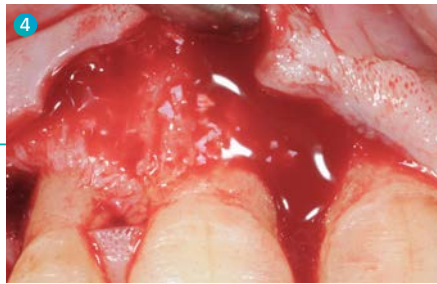
1 A deep infrabony defect is detectable (red line) adjacent to the central left upper incisor



2 Flap surgery with simplified papillary preservation flap was performed. A deep two-wall, non-containing infrabony defect is detectable at central incisor.



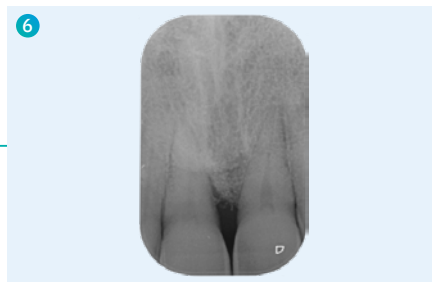
3 A mixture of REGENFAST and Geistlich Bio-Oss small granules was prepared.



4 After gentle root planning, REGENFAST was applied over the root. Then, mixture REGENFAST plus Geistlich Bio-Oss was gently adapted to fit the defect.



5 Primary closure was obtained with a 6-0 polyglycolic acid suture.



6 X-ray evaluation one year after surgery with optimal defect resolution. The final probing depth was minimal and there was approximately 1 mm of increased recession.

Geistlich Bio-Oss®



REGENFAST®



Used Products

Single Recession Coverage with Coronally Advanced Flap in Thick Biotype



Dr. Daniele Cardaropoli,
Torino, Italy

“Root coverage with Geistlich Mucograft® results in an excellent clinical outcome and high patient satisfaction.”

Initial Situation

Restoration of the gingiva around the dental enamel junction, while avoiding an autologous donor site.

Final Result

The collagen matrix, Geistlich Mucograft®, may be used successfully for recession coverage in combination with CAF. The device shows good, uneventful wound healing and excellent color match, while avoiding harvest of autologous soft tissue grafts. Additionally, a gain in gingival thickness has been achieved with Geistlich Mucograft® at the end of the treatment.



My Advice

- > Trim the collagen matrix the size of the receiving surgical bed to increase supply
- > Stabilize and suture the collagen matrix to enhance blood clot stabilization
- > Completely cover the matrix with the pedicle advanced flap avoiding excessive pressure





1 After measuring the dimension of the recession defect using a periodontal probe, the incisions for raising the flap are cut.



2 A split-full-split thickness flap is elevated and coronally mobilized.



3 The area of the papillae is de-epithelialized to allow anchorage of the flap coronal to the cemento-enamel junction.



4 Geistlich Mucograft® is applied dry to the defect and is fixed with 4 single sutures.



5 The coronally advanced flap is sutured over Geistlich Mucograft®.



6 Soft tissue situation immediately after suture removal.

Geistlich Mucograft®
(15 × 20 mm)



Used Products

Vestibular Incision Subperiosteal Tunnel Access (Modified VISTAX Technique)



Dr. Ulrike Schulze-Späte,
Jena, Germany

“Using Geistlich Fibro-Gide® in combination with a minimal-invasive technique for root coverage results in an excellent clinical outcome and a high level of patient satisfaction.”

Initial Situation

Root coverage of multiple recession defects (thin gingival phenotype, Miller Class I , RT1).

Therapeutic Approach

The modified vestibular incision subperiosteal tunnel access procedure with volume-stable Geistlich Fibro-Gide® can avoid complications and patient discomfort associated with harvesting autogenous tissues. Further, retrospective results demonstrate comparable clinical results to autogenous soft tissue grafting.

Final Result

A minimal-invasive tunnel approach in combination with the volume-stable Geistlich Fibro-Gide® resulted in complete root coverage. Overall, limited post-operative discomfort and esthetic appearance caused high patient satisfaction.



My Advice

- > The minimal traumatic approach allows simultaneous grafting of multiple contiguous recession defects.
- > Sufficient amount of vestibule needs to be present to allow for adequate gingival tissue advancement and root coverage.
- > Overall, limited post-operative discomfort and esthetic appearance result in high patient satisfaction.

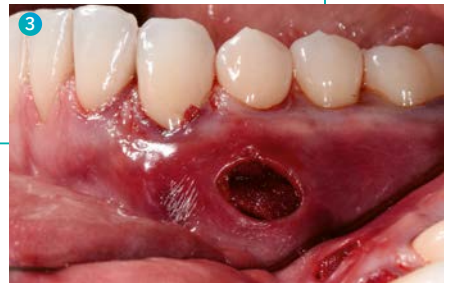




A full-thickness mucogingival tunnel was prepared through a minimal-invasive vestibular access incision apical to the teeth with gingival recessions.



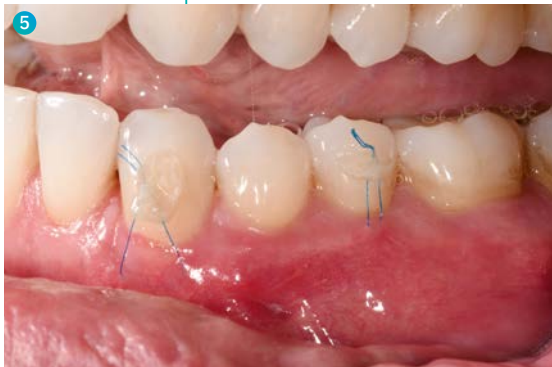
Insertion of Geistlich Fibro-Gide® into the subperiosteal tunnel.



Geistlich Fibro-Gide® in situ: the gingival margin had been coronally advanced and stabilized through insertion of Geistlich Fibro-Gide®.



1 week post-surgery: anchoring sutures were left in place for 1-2 weeks.



2 weeks post-surgery: anchoring sutures in place.



2 weeks post-surgery: removal of anchoring sutures.

Geistlich Fibro-Gide®
(20 × 40 × 6 mm)



Used Products

Root Coverage with Geistlich Fibro-Gide® and Coronally Advanced Flap



Dr. Vinay Bhide,
Aurora, Canada

“Multiple recessions on adjacent teeth in the maxilla can be treated successfully with a volume-stable collagen matrix and coronally advanced flap”

Initial Situation

The patient is a healthy, 60-year-old female who presented to our clinic with a chief complaint of progressive gum recession which had led to compromised esthetics and sensitivity involving the maxillary left lateral incisor (#10), canine (#11), and first bicuspid (#12) teeth. The teeth in question had 3-4 mm of gingival recession on the buccal surface with a sufficient zone of keratinized gingiva. These teeth also had obvious cervical abrasion.

Therapeutic Approach

Treatment goals for this case were to obtain complete root coverage, increase soft tissue thickness, and reduce/eliminate cervical sensitivity. A split-thickness envelope flap approach was used. Geistlich Fibro-Gide® was then trimmed, hydrated with saline, and placed over the exposed root surfaces. The flap was coronally advanced in a tension-free manner to completely cover the biomaterial and exposed root surfaces.

Final Result

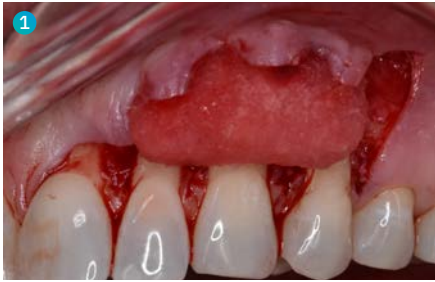
This case shows that the result following root coverage surgery to treat multiple adjacent teeth using a volume-stable collagen matrix is comparable to that seen with autologous connective tissue. At 1.5 years, the treated site remains stable. The tissue appears healthy and firm. The patient’s chief complaints, which relate to esthetics and sensitivity have been addressed and the patient is maintaining excellent oral hygiene and home care.



My Advice

- > Optimal case selection – patient factors, defect factors, and operator factors.
- > Root planing of exposed root surfaces to reduce prominences.
- > Careful flap design and split-thickness elevation.
- > Proper handling and placement of Geistlich Fibro-Gide®.
- > Tension-free coronal advancement of buccal flap to completely cover the biomaterial and root surfaces.
- > Meticulous suturing technique.





1 The interdental papillae were de-epithelialized and Geistlich Fibro-Gide® was placed over the exposed roots extending onto the bone. Note: the matrix was not secured with sutures.



2 Internal periosteal releasing incision was made to allow tension-free coronal advancement of the buccal flap to completely cover Geistlich Fibro-Gide®. The flap was secured with 5.0 Monocryl® sutures.



4 Healing progressed well at 2 months post-operatively and the dehiscence defect seen at 1 week appears to be healing. Soft tissue thickness is also evident at this stage.



3 1 week post-operative visit. The healing looks good and sutures are intact. There was a small soft tissue dehiscence at the buccal margin of the canine tooth.



5 At 6 months 100% root coverage has been achieved. Note the increase in keratinized gingiva at the canine tooth where there was previously delayed healing. The patient is happy with the esthetic and functional outcome.



6 At 1 year, we can see root coverage has been sustained. Complete root coverage is not seen for the upper left bicuspid, not surprising given the tooth had an older restoration which was removed prior to grafting and the CEJ on the proximal surface is visible. Partial coverage was achieved however and is much more pleasing to the patient.

Geistlich Fibro-Gide®
(20 × 40 × 6 mm)



Used Products

Recovery from Severe Periodontitis and Restoration of Tooth Structure



Dr. Florian Rathe, PhD
Forchheim, Germany

“The combination of subgingival instrumentation and Pocket-X® Gel seems to lead to significantly greater reductions in probing depth.”

Initial Situation

Another patient exhibited severe periodontitis, with a fissure at the crown 21, which should not be replaced as long as deep pockets were present at the abutment teeth 21 and 23. Additionally, tooth 11 was displaced buccally due to the pressure from severe palatal inflammation. The initial periodontal chart indicated deep pockets.

Therapeutic Approach

The standard treatment included extensive subgingival debridement, focusing on areas where the pocket depth was more than 4 mm.

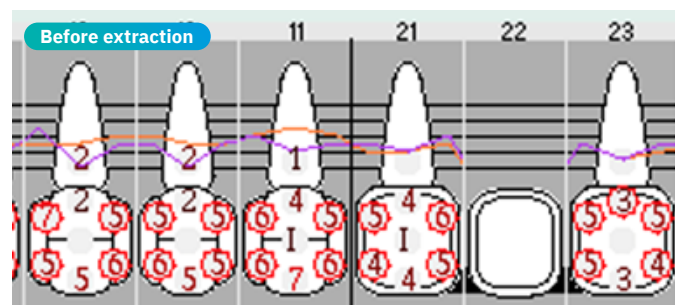
Final Result

Following four appointments of systematic periodontal therapy and the application of Pocket-X® Gel at the final appointment, the patient showed remarkable recovery. The inflammation had completely subsided, and tooth 11 spontaneously retroclined to its proper position. This transformation highlights the gel’s ability to facilitate significant periodontal healing and attachment level improvement without surgical intervention.

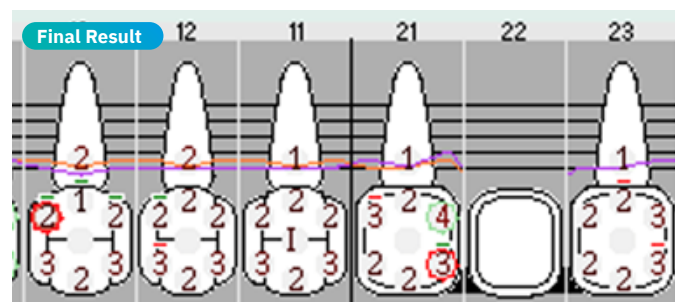


My Advice

- > In the case of acute inflammation with heavy bleeding or suppuration, application should ideally only take place in the subsequent session (otherwise the retention time in the pocket may be reduced)
- > The pocket should not be rinsed with CHX during the application session
- > Very good results in our own observational study for pockets up to 7 mm deep



Periodontal status before treatment. All pockets > 4 mm shown were instrumented subgingival in four appointments and Pocket-X® Gel was also applied once on the last appointment.



Results after treatment with instrumentation and Pocket-X® Gel.



X-ray of tooth 21 before therapy.



X-ray of tooth 11 before therapy.



Before treatment, flaring of tooth 21 because of severe palatal inflammation and pocketing. The standard treatment included extensive subgingival debridement, focusing on areas where the pocket depth was more than 4 mm.



X-Ray of tooth 11/21 after therapy: at the time of the re-evaluation, the inflammation had completely disappeared and tooth 11 had spontaneously retroclined again.



After treatment, remission of flaring of tooth 21 due to the elimination of periodontal inflammation and pocketing.

Pocket-X® Gel



Used Products

Non-Surgical Periodontal Treatment with Pocket-X® Gel in a Holistic Approach



Sonja Steinert, Dental Hygienist
Practice of Dr. Kai Zwanzig,
Bielefeld, Germany

“No matter what condition I used Pocket-X® Gel for, the wound healing was simply fantastic.”

Initial Situation

A 44-year-old patient presented at the oral surgery practice of Dr. Kai Zwanzig in Bielefeld. The patient attended for further treatment in the UPT phase. The previous treatment practice had already carried out unsuccessful periodontitis treatment with antibiotic therapy.



My Advice

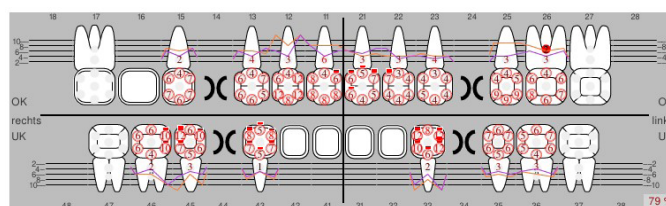
- > **The attentive and convinced patient:** The most important part is the patient's attention and understanding for the measures that are taken to achieve high compliance in care.
- > **Holistic approach:** Periodontitis not only reflects inflammation of the periodontium, but is a sign of the inadequate defense situation of the entire organism. Thus, a holistic approach is necessary to achieve successful treatment and long-term stable outcomes.
- > **Focus on intestinal health:** The immune defense of the intestine significantly influences the immune defense of other body surfaces such as the oral cavity, and even a small deficiency in vitamins, micronutrients or trace elements that are absorbed through the intestinal mucosa can be crucial for the health of the periodontium.

Therapeutic Approach

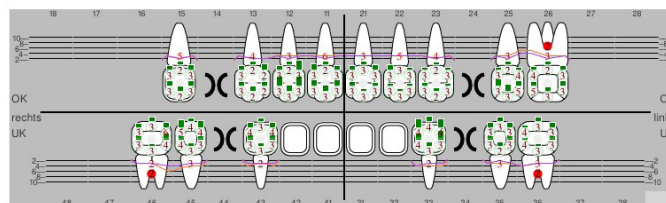
After the SPC 1-5 was carried out in the previous treatment practice without success, extensive nutritional advice, and advice on optimizing oral hygiene at home began. The holistic therapy began with strengthening the intestinal flora. Extensive instrumentation followed. Bacterial concretions, dental plaque, and tartar were removed supra- and subgingivally with various instruments as well as by means of hand and sonic methods. After the instrumentation, Pocket-X® Gel was applied to all periodontal pockets.

Final Result

The results after three months were promising, with a significant reduction in the clinical periodontal parameters of pocket probing depth and bleeding on probing. The patient's oral hygiene has improved significantly and both the practitioner and the patient are satisfied with the result. Another private UPT will follow.



Initial situation: PAR finding UPT 6 of 6 after unsuccessful periodontitis treatment with antibiotic therapy.



6-point measurement three months after holistic PA therapy with Pocket-X® Gel.



1 Frontal view after instrumentation: bleeding on probing and gingival recessions.



2 Measurement of high pocket probing depths with the periodontal probe after instrumentation.



3 Bacterial concretions, plaque and tartar were removed supra- and sub gingivally using various instruments as well as manual and sonic methods. The Pocket-X® Gel was then applied to all periodontal pockets.



4 Follow-up 3 months after Pocket-X® Gel treatment.



5 Follow-up 3 months: significant reduction in pocket probing depth when measured with the periodontal probe after instrumentation.



6 Significantly improved situation 3 months after treatment. No more bleeding on probing.

Pocket-X® Gel

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