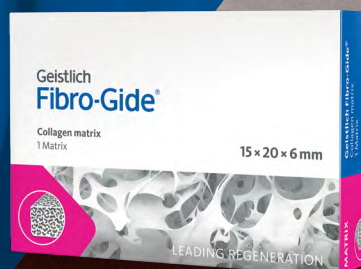


A CASE REPORT BY
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Root Coverage for Multiple Adjacent Teeth in the Maxilla with Geistlich Fibro-Gide®





► The 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.

► The Risk Profile

| Esthetic Risk Factors | Low Risk | Medium Risk | High Risk |
|---|---------------------------|---------------------------------|---------------------------|
| Patient's health | Intact immune system | Light smoker | Impaired immune system |
| Patient's esthetic requirements | Low | Medium | High |
| Height of smile line | Low | Medium | High |
| Gingival biotype | Thick - "low scalloped" | Medium - "medium scalloped" | Thin - "high scalloped" |
| Shape of dental crowns | Rectangular | | Triangular |
| Infection at implant site | None | Chronic | Acute |
| Bone height at adjacent tooth site | ≤ 5 mm from contact point | 5.5 - 6.5 mm from contact point | ≥ 7 mm from contact point |
| Restorative status of adjacent tooth | Intact | | Restored |
| Width of tooth gap | 1 tooth (≥ 7 mm) | 1 tooth (≤ 7 mm) | 2 teeth or more |
| Soft tissue anatomy | Intact | | Compromised |
| Bone anatomy of the alveolar ridge | No defect | Horizontal defect | Vertical defect |
| Classification of recession - RT1 i.e. intact interdental bone and soft tissues | | | |
| Severity of recession - mild to moderate | | | |
| Amount of keratinized gingiva - 2 mm or greater for all teeth involved | | | |



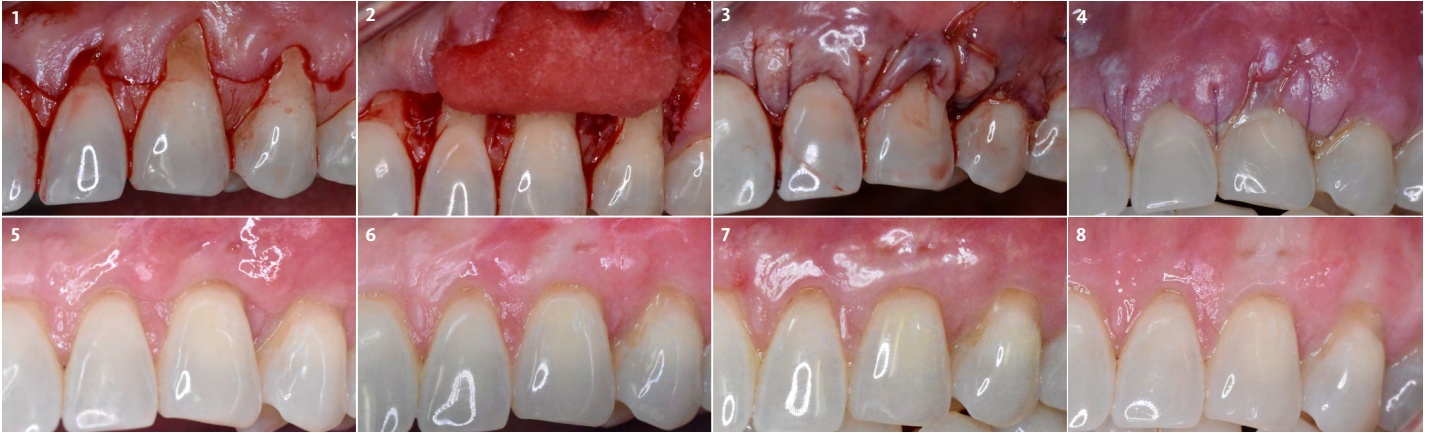
“The patient’s main priorities were to improve esthetics and reduce/eliminate root sensitivity. Soft tissue grafting was done with autologous connective tissue in other areas of her mouth many years ago and she was hesitant to undergo surgery again if it involved harvesting tissue from her palate due to the post-operative pain she experienced after these previous procedures.”

VINAY BHIDE, D.D.S., MSc.(PERIO), FRCD(C) AURORA, ONTARIO
Periodontist

Dr. Vinay Bhide is a board certified Periodontist with a special interest in periodontal plastics and reconstructive surgical procedures. Dr. Bhide did his dental and specialty training at the University of Toronto. In addition to private practice, Dr. Bhide is a clinical instructor in the Department of Periodontics at the University of Toronto. He is also a staff periodontist in the Center for Advanced Dental Care and Research at Mount Sinai Hospital, Toronto.

► The 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.



- 1 Incision design showing the sulcular incisions with horizontal incisions across the interdental regions ending with a remote oblique vertical releasing incision distal to the first bicuspid tooth.
- 2 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.
- 3 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 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 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.
- 6 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.
- 7 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.
- 8 At 1.5 years, the tissue looks stable, healthy and esthetic. The patient is very happy with results thus far both from esthetic and functional standpoints. She is still free of sensitivity.

SOFT TISSUE VOLUME

Geistlich Fibro-Gide® works well in multiple recession defects

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

► The Outcome

This case nicely 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, there is continued stability of the treated site (see image to left). The tissue appears healthy and firm. The patient's chief complaints of esthetics and sensitivity have been addressed and the patient is maintaining excellent oral hygiene and home care.



Briefly Speaking

► Keys to Success

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

► My Instruments

1. 7/8 Younger-Good curette
2. 15c blade on round scalpel handle
3. P24G periosteal elevator
4. Geistlich Fibro-Gide® 10 mm x 15mm x 6mm
5. Micro-curved smooth Castroviejo Needle Holder
6. 5-0 Monocryl® suture, P-3 needle, 18" violet monofilament

“The most important material for this case is the use of a volume-stable collagen matrix used in place of autologous connective tissue. Using this material has significantly decreased patient morbidity.”

► My Biomaterials

Geistlich Fibro-Gide® is a volume-stable collagen matrix specifically designed for soft tissue regeneration. As an alternative to connective tissue grafts, it is ideally suited for augmentation around natural teeth and implants.



Geistlich Fibro-Gide® provides soft tissue volume and long-term stability

Geistlich Fibro-Gide®

A volume stable solution for your soft tissue regeneration needs

“Case selection is the most important factor for obtaining optimal success in a patient like this – healthy, non-smoker, moderate recession with sufficient zone of keratinized gingiva, adequate vestibulum, and no interproximal bone loss in affected areas.”

► Clinicians Note

While autologous connective tissue remains the gold standard for treating gingival recession, there are many situations where a patient may not want to use their own tissue. Materials like Geistlich Fibro-Gide® provide clinicians with a viable alternative option to autologous connective tissue. In addition to demonstrating excellent esthetic and functional results in appropriately selected cases, they significantly reduce the morbidity associated with harvesting autologous tissues thereby enhancing the overall patient experience.



[Click here to view the webinar](#)

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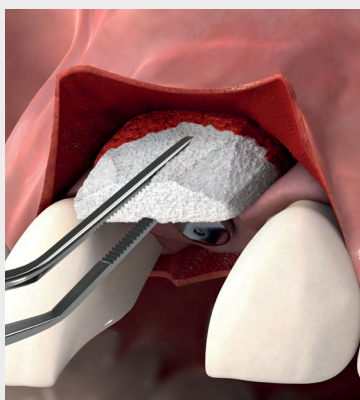
ABOUT BIOBRIEF

We know that exposure to new or refined treatment approaches brings innovation to practice. Geistlich Biomaterials is pleased to introduce a periodic opportunity to get up close and personal with creative clinicians from around the world. Focused on peer-to-peer exchange, BIOBRIEF features clinically relevant cases and techniques in specific therapeutic areas – highlighted with valuable insights about materials and instrumentation, as well as KEYS TO SUCCESS.

Geistlich Biomaterials – bringing you *regeneration on time*.

► The Therapeutic Area

Geistlich biomaterials can play a significant role in the treatment of Soft Tissue Regeneration. Specifically designed for this indication, Geistlich Fibro-Gide® is the preferred alternative to connective tissue grafts. This volume-stable collagen matrix has been proven to show excellent integration into the surrounding soft tissues while maintaining volume stability.



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

Indications:

Geistlich Fibro-Gide® is indicated for the following uses: Soft tissue augmentation; localized gingival augmentation to increase keratinized tissue around teeth and implants; Alveolar ridge reconstruction for prosthetic treatment; and recession defects for root coverage.

Warnings:

As Geistlich Fibro-Gide® 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, redness and local inflammation.

For more information on contraindications, precautions, and directions for use, please refer to the Geistlich Fibro-Gide® Instructions for Use at:

www.dental.geistlich-na.com/ifu