

LEADING REGENERATION

**Geistlich**  
Biomaterials

# Soft-Tissue Regeneration



# Overview

Soft-tissue regeneration has gained importance in restoring functionality and esthetics, due to increasing patient demand. Autologous free gingival grafts and connective tissue grafts have been the standard materials used in these procedures however, harvesting soft-tissue from the palate is painful for the patient and time consuming for the clinician.

## Gingival Recession

Gingival recession is extremely common and can lead to complications such as root caries, compromised esthetics, root surface sensitivity and impaired oral hygiene.

## Lack of Keratinized Tissue

Investigators still cannot agree on the importance of the presence of keratinized tissue. Various studies have shown however, that lack of keratinized soft-tissue around implants and teeth can have negative consequences in both function and esthetics.<sup>1-3</sup>

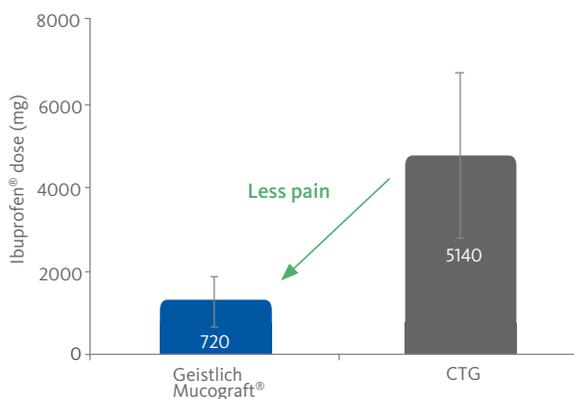
## Advantages of Utilizing Geistlich Mucograft® in Soft-Tissue Regeneration Procedures

- › No harvest site morbidity<sup>4</sup>
- › Gain of keratinized tissue is comparable to a connective tissue graft or a free gingival graft<sup>8,9</sup>
- › Optimal alternative to autologous grafts
- › Consistent quality, unlimited supply

## Improved Patient Satisfaction

The use of Geistlich Mucograft® in soft-tissue regeneration procedures results in a significant reduction in total surgery time and post-operative discomfort vs. a connective tissue graft.

Total Ibuprofen® dose 10 days post-operative



Significantly less patient pain with Geistlich Mucograft® (prototype)\* as compared to connective tissue graft (CTG).<sup>10</sup>

## Motivation for Recession Coverage Treatment

- › Esthetic concerns<sup>4,5</sup>
- › Buccal cervical dentin hypersensitivity<sup>4,5</sup>

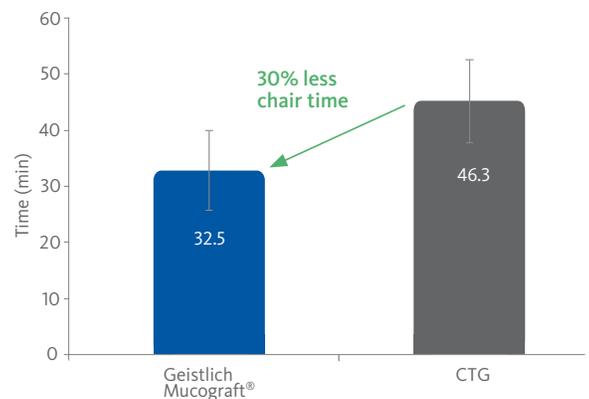
## Lack of Keratinized Tissue Around Implants is Associated With

- › Gingival recession over a period of five years<sup>1</sup>
- › Soft-tissue attachment loss<sup>2</sup>
- › Increased plaque accumulation lingually<sup>1</sup>
- › Inflammation of the soft-tissue<sup>2</sup>
- › More prone to brushing discomfort<sup>3</sup>

## Presence of Keratinized Tissue Around Implants is Associated With

- › Significant effect on the health and stability of the soft-tissue<sup>6,7</sup>

Total surgery time



Significantly less surgical chair time with Geistlich Mucograft® when compared to connective tissue graft (CTG).<sup>8</sup>

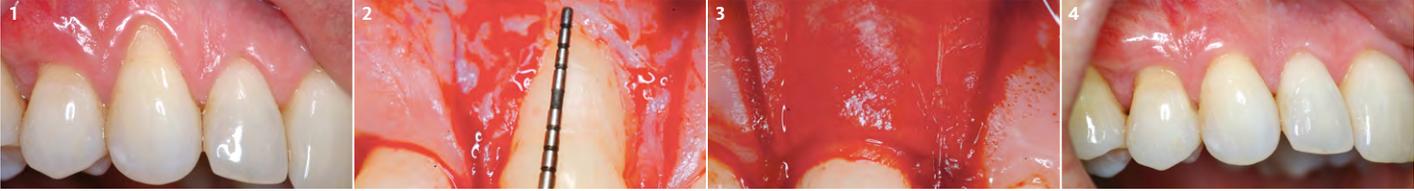
# Case Documentation

## ▶ Single Recession Coverage with Coronally Advanced Flap in Thin Biotype

Dr. Michael K. McGuire and Dr. E. Todd Scheyer, Houston, TX, USA

**Objectives**

- › Root coverage combining Geistlich Mucograft® with coronally advanced flap (CAF) without the morbidity of soft-tissue graft harvest



- 1 Pre-operative image showing the recession defect on tooth # 6.
- 2 After elevation of a partial thickness flap, the interdental papillae are de-epithelialized.
- 3 Geistlich Mucograft® is placed over the defect and sutured to the papillae.
- 4 Outcome 1 year after treatment.

## ▶ Increase of Width of Keratinized Tissue Around Implants

Dr. Doina Panaite and Dr. Allan Charles, Pasadena, CA, USA

**Objectives**

- › Increasing the width of keratinized tissue around implants with Geistlich Mucograft® while also achieving vestibule creation and oral hygiene access improvement



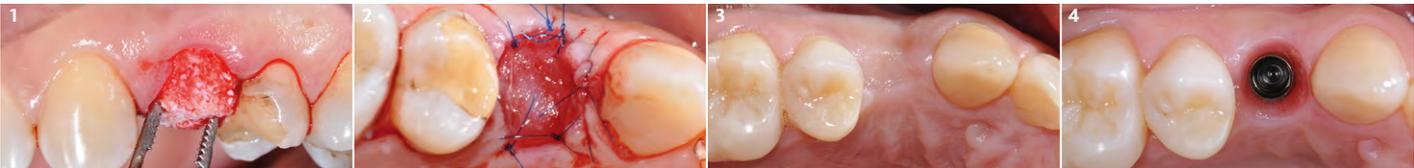
- 1 Pre-operative view. A small band of keratinized gingiva is present.
- 2 The band of keratinized gingiva is split and a split-thickness flap is elevated exposing connective tissue and periosteum.
- 3 Geistlich Mucograft® is sutured to the recipient site.
- 4 Mucogingival appearance (4 mm of keratinized tissue) 6 months after surgery.

## ▶ Socket Preservation for Early Implant Placement

Dr. Raffaele Cavalcanti, Bari, Italy

**Objectives**

- › Optimum soft-tissue situation 6 weeks after extraction
- › The buccal and crestal contours of the soft-tissue should be supported and preserved after extraction



- 1 Extraction socket filled with Geistlich Bio-Oss Collagen®.
- 2 Geistlich Mucograft® Seal sutured with single-interrupted sutures.
- 3 Pre-operative clinical situation 10 weeks after extraction (prior to implant placement).
- 4 Clinical situation of the soft-tissues 4 months after implant placement.



## 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 **Soft-Tissue Regeneration** procedures.

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### Recommended Products for Soft-Tissue Regeneration Procedures

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#### MATRICES

Geistlich  
**Mucograft®**



Geistlich  
**Mucograft® Seal**



### The Ideal Geistlich Biomaterials for Soft-Tissue Regeneration

These proven and reliable products provide a foundation for long-term clinical success in regenerative dentistry.

Geistlich Mucograft® and Geistlich Mucograft® Seal are 3D collagen matrices that provide an alternative to autogenous soft-tissue grafts.

For additional information about Soft-Tissue Regeneration, please visit the Dental Professional section of our website: [www.geistlich-na.com](http://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 Mucograft®, Geistlich Mucograft® Seal and Geistlich Bio-Oss Collagen® Instructions for Use at: [www.geistlich-na.com/ifu](http://www.geistlich-na.com/ifu)