

Technical Guidelines

General Guidelines

- › Geistlich Mucograft® is a collagen matrix used as an alternative to connective tissue grafts and free gingival grafts. It is indicated for use in recession coverage defects and procedures to increase the width of keratinized tissue. Considerations regarding patient selection criteria, patient compliance and surgical requirements, are the same as those used for autologous soft-tissue grafts.
- › Patient selection and compliance are crucial for optimal clinical outcome. Patient expectations should also be considered.
- › Geistlich Mucograft® is ready to use without the need for pre-hydration or rinsing.
- › Geistlich Mucograft® should be trimmed dry and cut precisely to the required size to avoid tension. For accurate trimming of Geistlich Mucograft®, the use of a template may be helpful.
- › Geistlich Mucograft® should be manipulated and applied in a dry state.
- › Orientation of Geistlich Mucograft®: Position the compact macro-structure facing away from the wound bed and the spongy micro-structure towards the bone and/or the periosteum.
- › Do not compress Geistlich Mucograft®: The volume and height of Geistlich Mucograft® should not be compacted before, during or after surgery.
- › Immobilization of Geistlich Mucograft®: For proper wound healing, Geistlich Mucograft® should be immobilized with sutures to allow for blood clot stabilization.
- › No tension around Geistlich Mucograft®: Tension of the soft-tissues around Geistlich Mucograft® should be avoided. If possible, wider than normal flaps are recommended.
- › Post-operative treatment: Exercise caution at and around the surgical site. For the first 4 weeks, advise patients to avoid brushing and flossing at the gingival margin and chewing hard foods. For the first 6 months, avoid probing, scaling and root planning of the treated sites.

Please see reverse for Guidelines regarding Gain of Keratinized Tissue and Recession Coverage.



Gain of Keratinized Tissue

- › The maximum width of the band of keratinized tissue that can be obtained is genetically predetermined.
- › Pre-operative situation: At the coronal margin of the surrounding teeth or implant, a small band of keratinized tissue should be present that can provide the biological information to the regenerated soft-tissue. With Geistlich Mucograft®, comparable results to an autologous graft are obtained if a band of at least 1 mm of keratinized tissue is present.
- › Good access: A minimum vestibule depth should be available in posterior sites to allow surgery and tension-free healing of the treated site.
- › Split-thickness flap: Geistlich Mucograft® should be applied on a periosteal bed since initial blood supply is important for regenerative healing.
- › Open healing (onlay technique): The elevated flap may be excised or left without sutures at its base.
- › Geistlich Mucograft® should be sutured tension-free to the surrounding tissue and may be left exposed, without a wound dressing. If suturing the apical part of Geistlich Mucograft® is required, sufficient vestibule depth should be available to allow tension-free healing.
- › After the gain of keratinized tissue with Geistlich Mucograft® has been achieved, a minimum healing period of 3 months is recommended if re-entry of the site is necessary for further treatment.

Recession Coverage

- › In general, recession treatment in Miller Class I and II defects show significantly higher predictability and success rates than Miller Class III and IV defects.
- › Recession coverage procedures in the maxilla often show better results than in the mandible due to the reduced muscular tension and the adequate vestibulum depth of the maxilla.
- › The maximum recession coverage that can be achieved is biologically determined by the cemento-enamel junction.
- › Geistlich Mucograft® should remain completely submerged under the flap to avoid premature resorption of the collagen matrix as adequate blood supply is important for regenerative healing.
- › The flap should be sutured tension-free.
- › Geistlich Mucograft® should not be compressed during or after surgery. Avoid suturing Geistlich Mucograft® together with the flap, over-suturing of the flap, or post-operative compression of the wound.
- › When using Geistlich Mucograft® in recession coverage procedures, outcomes often continue to improve 6 months to a year post-operatively.
- › The application of Geistlich Mucograft® should be combined with a coronally advanced flap (CAF) or a coronally advanced tunnel technique.



Mucogingival appearance (4 mm of keratinized tissue) 6 months post surgery.

Case courtesy of Dr. Doina Panaite and Dr. Allan Charles Houston, TX, USA.



Complete root coverage 1 year after treatment.

Case courtesy of Dr. Michael K. McGuire and Dr. E. T. Scheyer Houston, TX, USA.