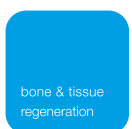
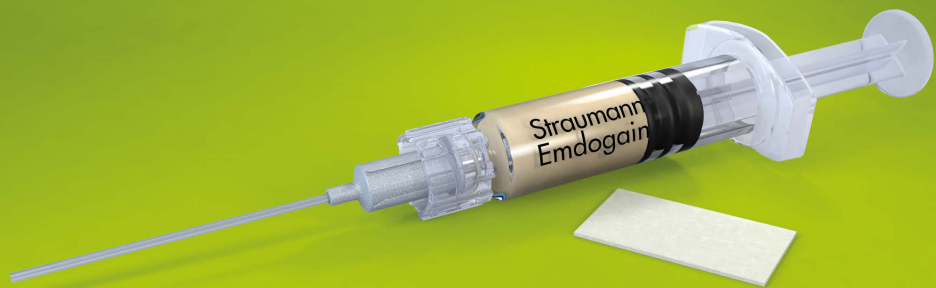




Straumann® Emdogain® & botiss mucoderm®
Root coverage procedures
– the patient friendly way.



Straumann® Emdogain® & botiss mucoderm®

Esthetics are becoming increasingly important and with this trend, the request for root coverage procedures.

Although it has been shown that adding Straumann® Emdogain® to a coronally advanced flap (CAF) procedure leads to clinical results after one and after ten years comparable to a CAF procedure with an autologous connective tissue graft¹, the addition of a connective tissue graft is still recommended when treating patients with a thin gingival biotype². Tissue harvesting is associated with patient discomfort and a higher risk for post-operative complications. The combined application of Straumann® Emdogain® and botiss mucoderm® is a valid alternative to autologous tissue grafts³.

STRAUMANN® EMDOGAIN®

Straumann® Emdogain® is a unique gel containing enamel matrix derivative of porcine origin. The main component is amelogenin, which has demonstrated the ability to stimulate certain cells types involved in the healing process of soft and hard tissues towards a regenerative pattern, thus leading to true periodontal regeneration and accelerated oral wound healing.

In root coverage procedures, using Straumann® Emdogain® leads to:

- Improved root coverage when compared with coronally advanced flap (CAF) procedures alone^{4,7}
- Improved quantity of keratinized tissue⁵
- True regeneration as shown in human histological studies⁸
- Less post-operative pain and swelling for the patient⁹

BOTISS MUCODERM®

botiss mucoderm® provides a true alternative to the patient's connective tissue graft in certain indications (recession coverage Miller class I-III¹⁰⁻¹², broadening of attached gingiva¹³, soft tissue augmentation/thickening¹⁴⁻¹⁷). This stable 3-dimensional collagen soft tissue replacement, made of porcine dermis, supports fast revascularization and soft tissue integration, including color and texture.

As an alternative to autologous tissue grafts, using botiss mucoderm® leads to:

- The maintenance or an increase in soft tissue thickness
- Good integration into the surrounding tissue with respect to color and texture
- Reduced patient chair time
- No donor site morbidity
- No pain associated with tissue harvesting



Clinical case by Prof. Dr. Giovanni Zucchelli, realized with a coronally advanced flap together with Straumann® Emdogain® and botiss mucoderm®

BEFORE THE SURGERY



STRAUMANN® EMDOGAIN® AND BOTISS MUCODERM®

The combination of choice for your root coverage procedures for:

- Improved esthetics
- Long term esthetics
- Less post-surgical discomfort for your patients
- Faster and easier procedures

THREE YEARS AFTER THE SURGERY



Prof. Giovanni Zucchelli

《《 *The adjunctive use of Emdogain and mucoderm to the Coronally Advanced Flap allows to improve the quality of attachment between the soft tissue and the root and increase soft tissue thickness. Both these factors are critical for the long term stability of root coverage outcome.* 》》



For further informations please visit
www.straumann.com

REFERENCES

- 1 McGuire MK, Scheyer ET, Nunn M. Evaluation of human recession defects treated with coronally advanced flaps and either enamel matrix derivative or connective tissue: comparison of clinical parameters at 10 years. *J Periodontol.* 2012 Nov;83(11):1353-62, *Clin Oral Investig.* 2016 Sep;20(7):1791-800.
- 2 Cairo F, Cortellini P, Pilloni A, Nieri M, Cincinelli S, Amunni F, Pagavino G, Tonetti MS. Clinical efficacy of coronally advanced flap with or without connective tissue graft for the treatment of multiple adjacent gingival recessions in the aesthetic area: a randomized controlled clinical trial. *J Clin Periodontol.* 2016 Oct;43(10):849-56.
- 3 Shirakata Y, Sculean A, Shinohara Y, Sena K, Takeuchi N, Bosshardt DD, Noguchi K. Healing of localized gingival recessions treated with a coronally advanced flap alone or combined with an enamel matrix derivative and a porcine acellular dermal matrix: a preclinical study.
- 4 Tonetti MS, Jepsen S; Working Group 2 of the European Workshop on Periodontology. Clinical efficacy of periodontal plastic surgery procedures: consensus report of Group 2 of the 10th European Workshop on Periodontology. *J Clin Periodontol.* 2014 Apr; 41 Suppl 15:S36-43.
- 5 Pilloni et al, Root coverage with a coronally positioned flap used in combination with enamel matrix derivative: 18 month clinical evaluation. *J Periodontol.* 2006; 77:2031-2039.
- 6 Cairo F, Nieri M, Pagliaro U. Efficacy of periodontal plastic surgery procedures in the treatment of localized facial gingival recessions. A systematic review. *J Clin Periodontol.* 2014 Apr;41 Suppl 15:S44-62.
- 7 Cairo F, Pagliaro U, Nieri M. Treatment of gingival recession with coronally advanced flap procedures: a systematic review. *J Clin Periodontol.* 2008 Sep;35(8 Suppl):136-62.
- 8 McGuire MK, Scheyer ET, Schupbach P. A Prospective, Cased-Controlled Study Evaluating the use of Enamel Matrix Derivative on Human Buccal Recession Defects: A Human Histologic Examination. *J Periodontol.* 2016 Feb 1:1-34.
- 9 Jepsen S. et al. *J Periodontol* 2004: A Randomized Clinical Trial Comparing Enamel Matrix Derivative and Membrane Treatment of Buccal Class II Furcation Involvement in Mandibular Molars. Part I: Study Design and Results for Primary Outcomes.
- 10 Cieslik-Wegemund M et al, Coverage of multiple gingival recessions using the tunnel technique and collagen matrix – Mucoderm®. Poster Europerio 2015.
- 11 Cosgarea R, Juncor R, Lascu L, Arweiler N, Sculean A. Treatment of multiple gingival recession defects with a new collagen membrane. Poster Europerio 2015.
- 12 Milinkovic I, Rakaservic D, Aleksic Z, Jankovic S; Clinical application of collagen tissue matrix and enamel matrix derivative in the treatment of multiple gingival recessions. Poster Europerio 2015.
- 13 Horváth A, Molnár B, Gera I, Windisch P; Comparison of different approaches aimed at increasing peri-implant keratinised mucosa. Poster ITI World Symposium 2014.
- 14 Puisys A, Vindasiute E, Linkeviciene L, Linkevicius T. The use of acellular dermal matrix membrane for vertical soft tissue augmentation during submerged implant placement: a case series. *Clin Oral Implants Res.* 2015 Apr;26(4):465-70.
- 15 Puišys A, Žukauskas S, Kubilius R, Vindašiūtė E, Linkevicius T; Early implant placement in aesthetic area with simultaneous guided bone regeneration and soft tissue augmentation using collagen tissue matrix membrane. *Clin. Oral Impl. Res.* 26, Suppl. 12, 2015.
- 16 Schmitt CM, Matta RE, Moest T, Humann J, Gammel L, Neukam FW, Schlegel KA. Soft tissue volume alterations after connective tissue grafting at teeth: the subepithelial autologous connective tissue graft versus a porcine collagen matrix - a pre-clinical volumetric analysis. *J Clin Periodontol.* 2016 Jul;43(7):609-17.
- 17 Zafropoulos GG, Deli G, Hoffmann O, John G. Changes of the peri-implant soft tissue thickness after grafting with a collagen matrix. *J Indian Soc Periodontol* 2016

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