

# Treatment of Gingival Recession with Straumann® Emdogain™

A winning case from the Straumann Emdogain “Growth in Recession” Case Competition

A 50-year-old, non-smoking female presented with 8.0 mm of facial recession #23. A Miller Class II recession defect was noted. The patient refused orthodontic therapy to correct anterior crowding. The first phase of treatment included non-surgical periodontal therapy.

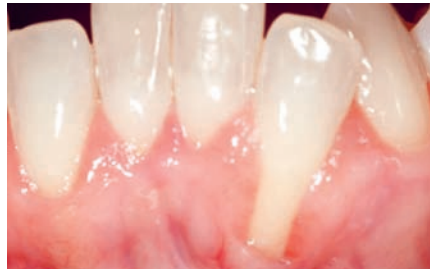
Thorough root debridement and flattening of the root surface was completed followed by Straumann® PrefGel® (2 minutes) to prepare the root for Straumann® Emdogain™. The root was thoroughly rinsed and air-dried prior to the application of Emdogain. Incisions were made at the level of the CEJ to create a mesial and distal pedicle followed by vertical releasing incisions and partial thickness dissection. The individual pedicles were created and then sutured together as a double pedicle.

The maxillary left premolar palatal area was used for the donor tissue for the subepithelial connective tissue graft. After harvesting, the CTG was then sutured to the interproximal papillae and laterally to stabilize the graft. Emdogain was applied over the CTG and into the vestibule prior to coronally position the double pedicle (DP) graft. A periosteal releasing incision was made to coronally position the pedicle for tension-free suturing over the CT graft. The pedicle was intentionally positioned slightly coronal to the CEJ.

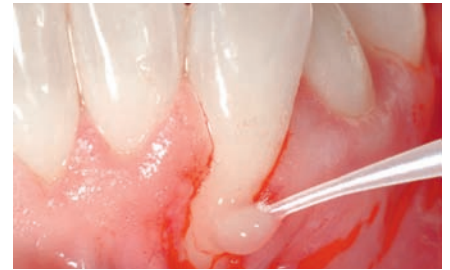
At twelve days, healing was excellent. At 3 months, 100% root coverage was achieved with 0.5 mm probing depth on the mid-buccal of #23. An increase in attached gingiva was achieved.



**Fig. 1**



**Fig. 2**



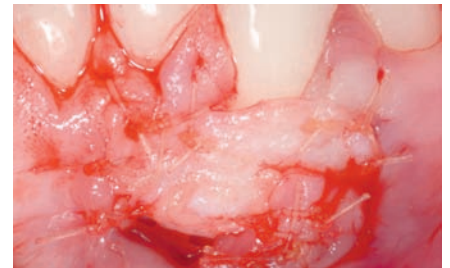
**Fig. 3**



**Fig. 7**



**Fig. 8**



**Fig. 9**



**Fig. 13**



**Fig. 14**

# FIGURES

**Fig. 1:** Presentation of a 50-year-old, healthy, non-smoking female with #23 recession. 0.0 mm of KG is measured as well as 8.0 mm of facial attachment loss. A Miller Class II recession defect is noted.

**Fig. 2:** Close-up of #23 area.

**Fig. 3:** After thorough root debridement, PrefGel® is applied for 2 minutes. Emdogain™ is added onto the root surface after irrigation for 30 seconds

and air-drying.

**Fig. 4:** Incisions are made at the level of the CEJ to create a mesial and distal pedicle with vertical releasing incisions. A partial thickness dissection is completed deep into the vestibule.

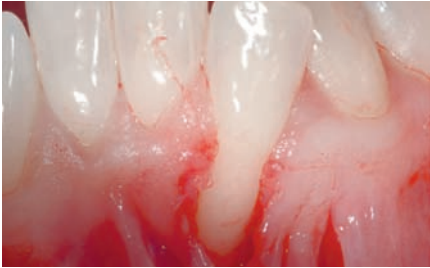
**Fig. 5:** The two individual pedicles have been formed and are lying passively in the vestibule.

**Fig. 6:** Emdogain is reapplied onto the root surface. The double pedicle (DP) flap has been created by suturing of the pedicles together.

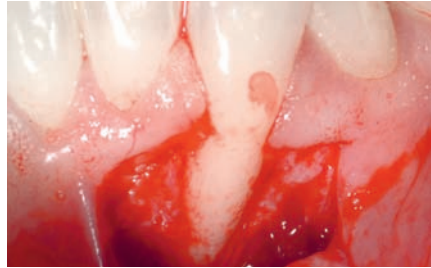
**Fig. 7:** The donor site.

**Fig. 8:** The final graft measuring 10.0 x 7.0 mm.

**Fig. 9:** The CTG is sutured to stabilize the graft. Emdogain is applied over the CTG



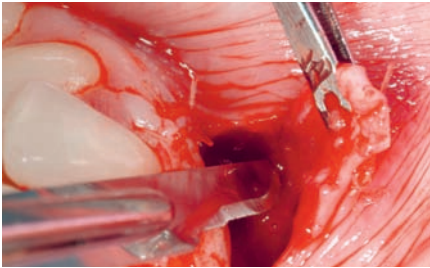
**Fig. 4**



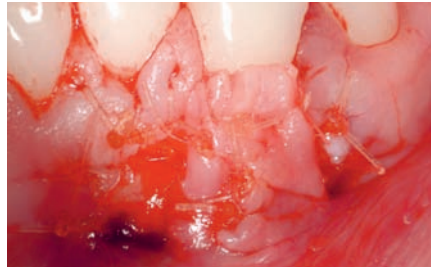
**Fig. 5**



**Fig. 6**



**Fig. 10**



**Fig. 11**



**Fig. 12**

prior to coronally positioning the DP.

**Fig. 10:** A periosteal releasing incision is made to allow tension-free suturing.

**Fig. 11:** The DP is coronally positioned and sutured.

**Fig. 12:** The maxillary left palate at 12 days post-op.

**Fig. 13:** 12-day post-op of #23.

**Fig. 14:** 3-month post-op. 100% root coverage has been achieved with 0.5 mm probing depth on the mid-buccal of #23.

# AUTHOR



## **DR. ROBERT LEVINE, DDS**

1977 B.S. University of Maryland, College Park • 1981 DDS Temple University School of Dentistry • 1984 Certificate in Periodontics, University of Pennsylvania School of Dental Medicine, PA, USA • Diplomate, American Board of Periodontology • Fellow, International Team for Implantology (ITI) of Basel, Switzerland • Fellow, College of Physicians, Philadelphia, PA, USA • Chairman Emeritus of Periodontics at Albert Einstein Medical Center (1984–2003) • Clinical Professor in the Post-Graduate Department of Periodontology and Oral Implantology at Temple University Kornberg School of Dentistry • Clinical Associate Professor of Periodontics in the Post-Graduate Department of Periodontics, Periodontal Prosthesis and Implantology at the University of Pennsylvania School of Dental Medicine • Member of the Editorial Boards of the Journal of Periodontology (1998–2007), Clinical Implant Dentistry and Related Research, The Compendium of Continuing Education in Dentistry, and Inside Dentistry • Full-time private practice focusing on surgical implant placement, cosmetic oral plastic surgery procedures, regenerative therapy, adult orthodontics and oral medicine • Author and co-author of over 50 articles on periodontal related topics, dental implants, orthodontic-periodontal therapy and oral medicine; has also contributed to 6 textbooks