Treatment of Gingival Recession with Straumann[®] Emdogain[™]

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

A 58-year-old, non-smoking male presented with chief complaint of recession and root sensitivity of tooth #6. At presentation, #6 showed 4.0 mm of facial attachment loss. The Double Pedicle Connective Tissue (DPCTG) technique was used due to the wide interproximal papillae present.

Thorough root debridement and flattening of the root surface was completed and followed by Straumann® PrefGel® (2 minutes) to prepare the root for Straumann Emdogain[™]. The root was thoroughly rinsed and air dried prior to Straumann Emdogain application. 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. Emdogain was reapplied onto the root surface and into the vestibular area prior to placement of the CT graft.

The CT graft was harvested from the UR palate (premolar area) and sutured in place by 5-0 plain gut to the level of the CEJ. A periosteal releasing incision was made to coronally position the pedicle for tension-free suturing over the CT graft. The pedicle is intentionally positioned slightly coronal to the CEJ.

At the 5-month visit, tooth #6 showed excellent color blend and soft tissue healing. Probing depths were < 1.0 mm on the labial aspect with no bleeding upon probing and no sensitivity. 100% root coverage was achieved.





Fig. 2



Fig. 3



Fig. 7

Fig. 8





FIGURES

Fig. 1: Presentation of #6 Miller Class I recession defect.

Fig. 2: Prepared root surface.

Fig. 3: Emdogain[™] is immediately added onto the root surface judiciously.

Fig. 4: Incision design for creating a double pedicle.

Fig. 5: The joining of the 2 papillae has been accomplished with sutures of 5-0 plain gut with a very fine P-2 needle.

Fig. 6: Emdogain being reapplied onto the root surface.

Fig. 7: The palatal CT graft has been harvested from the UR palate and sutured in place by 5-0 plain gut to the

level of the CEJ. The sutured double pedicle is sitting passively apical to the CT graft.

Fig. 8: The double pedicle graft has been coronally positioned after a periosteal vestibular releasing incision.

Fig. 9: UR palatal donor site in the bicuspid region lingual to #4 and 5.





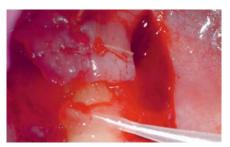


Fig. 6



Fig. 10



Fig. 11



Fig. 12

Fig. 10: 2-week post-op of the UR palatal

Fig. 11: 2-week post-op of #6.

Fig. 12: 5-month post-op visit; #6 showing excellent color blend and soft tissue healing.

AUTHOR



R. 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 Periodontology (1998–2007), Clinical 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, orthodonticperiodontal therapy and oral medicine; has also contributed to 6 textbooks