

Treatment of Gingival Recession Using OrACELL[®] Decellularized Dermis

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CASE STUDY

Gingival recession, a common dental condition, is often treated with a root coverage procedure.^{1,2} In the past, subepithelial connective tissue grafts (SCTG) have been used to treat gingival recession; however, these grafts require a secondary surgical site that often leads to increased patient morbidity.^{1,2,3} For this reason, acellular dermal matrix allografts have become a popular choice among surgeons to treat gingival recession.^{2,4}

One such allograft, Oracell, is decellularized human dermis that is designed for maxillofacial applications. This matrix of collagen, elastin, and retained endogenous growth factors is designed to be a scaffold for tissue regeneration and to support healing where applied.

The following case presentation involves root coverage procedures for gingival recession using Oracell.

Patient

- 55-year-old Female; Excellent Health

Diagnosis

- Gum recession in lower left and lower right bicuspid and canines (Figure 1)

Treatment

- Changes to tooth brushing technique to eliminate mechanical trauma
- Pre-medicated using Clindamycin, pre-rinsed with chlorhexadine, given ibuprofen prior to procedure. Local infiltration with lidocaine and epinephrine
- Roots of teeth planed aggressively and burnished with tetracycline
- Sulcular incisions made tunneling under the facial papillae at the level of the adjacent CEJs from numbers 20-23; Incisions continued as a partial thickness dissection beyond mucogingival junction into the vestibule

- Oracell decellularized dermis used as connective tissue graft to #21 and #22
- Oracell soaked, trimmed, then pulled into position through the space between the teeth and the overlying tissues, and then sutured against the tooth roots with continuous sling suture tied on the lingual
- Buccal flap coronally advanced and sutured over graft
- A periodontal dressing was used to protect graft

Outcome

- Excellent healing at 1 month follow-up, sutures removed (Figures 2-3)

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Figure 1.
Pre-operative Root Exposure



Figure 2.
1 Month Post-operative Healing

Results from case studies are not predictive of results in other cases. Results in other cases may vary.

References

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2. Ayub LG, Ramos UD, Reino DM, et al. A randomized comparative clinical study of two surgical procedures to improve root coverage with the acellular dermal matrix graft. *J Clin Periodontol.* 2012;39:871-878.
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4. Rahmani ME, Mohammed A, Rigi Lades ME, et al. Comparative clinical evaluation of Acellular Dermal Matrix Allograft and connective tissue graft for the treatment of gingival recession. *J Contemp Dent Prac.* 2006;2:63-70.

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