
**Purpose:** To compare 2 surgical techniques with the acellular dermal matrix graft (ADMG) for root coverage.

**Materials and Methods:** 15 patients (9M and 6F, age: 23-54) were selected for this study. The criteria were (1) systemic health and no contraindication for periodontal surgery, (2) no previous periodontal surgical treatment on the involved sites, (3) bilateral Miller Class I or II ≥ 2mm maxillary or mandibular gingival recession areas. A total of 30 recession areas were treated.

Before surgery, in each patient, one of 2 teeth with a gingival area was randomly assigned to the control and test groups. In the control group, ADMG was used with the technique proposed by Barros et al. (2004), in which an extended surgical flap and releasing incisions were performed. In the test group, a modification of the Bruno technique (Bruno, 1994), which consisted of an extended surgical flap without releasing incisions, was used. (See Fig.1)

**Findings:** (1) Clinical parameters

Table 1. Clinical parameters (mean values ± SD) at baseline and 12 months – intra-group comparison

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Test</th>
<th></th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>baseline</td>
<td>12 months</td>
<td>p-value</td>
</tr>
<tr>
<td>GR (mm)</td>
<td>2.88 ± 0.81</td>
<td>0.72 ± 0.65</td>
<td>0.000*</td>
</tr>
<tr>
<td>PD (mm)</td>
<td>1.52 ± 0.39</td>
<td>1.63 ± 0.33</td>
<td>0.438</td>
</tr>
<tr>
<td>RCAL (mm)</td>
<td>11.23 ± 2.50</td>
<td>9.50 ± 2.39</td>
<td>0.004*</td>
</tr>
<tr>
<td>KT (mm)</td>
<td>1.94 ± 1.66</td>
<td>2.10 ± 1.01</td>
<td>0.598</td>
</tr>
<tr>
<td>TKT (mm)</td>
<td>0.48 ± 0.29</td>
<td>1.04 ± 0.44</td>
<td>0.001*</td>
</tr>
</tbody>
</table>

*Statistically significant difference at p≤0.05.

GR, gingival recession height; PD, probing depth; RCAL, relative clinical attachment level; KT, width of keratinized tissue; TKT, thickness of keratinized tissue.

(2) At 12 months, among clinical parameters, there was no statistically significant difference between 2 groups except width of keratinized tissue (KT). The control group showed better results in terms of width of keratinized tissue (KT).

(3) The percentage of root coverage: Control group (83.28%) \(\approx\) Test group (74.32%) (NS)

**Conclusions:** Both surgical procedures show statistically similar results in relation to root coverage and other clinical outcomes.
**Harris RJ, Harris LE, Harris CR, Harris AJ. Evaluation of root coverage with two connective tissue grafts obtained from the same location. Int J Periodontics Restorative Dent 2007; 27: 333-39.**

**Purpose:** To evaluate the clinical results achieved when two different connective tissue (CT) grafts that were used in different subepithelial grafts for root coverage, were removed from the same donor area at different times.

**Material and Methods:** 60 patients with Miller’s class I or II defects were included in this study and were followed up for 3 months. Defects treated with the first CT graft were group I and defects treated with second CT graft were group II. Recession, probing depth, width of keratinized tissue, and attachment levels were measured by the same examiner before the procedure and after healing. Patient factors analyzed were gender, smoking history, and time between surgeries. CT graft was harvested from the palate, partial thickness flaps were elevated at the recipient site, graft was stabilized. Double pedicles, coronally positioned flap, or a combination was used to completely cover the grafts harvested from the palate. At a later time, another graft was harvested from the same donor site to treat different recession defects. Similar data were obtained. Final measurements were done 3 months postoperatively. Data were analyzed using EXCEL 2000.

**Findings:** There were no statistically significant differences between groups 1 and 2 in any of the individual measurements. The mean root coverage was better in group 2 compared to group 1 (statistically significant). None of the patient factors were associated with mean root coverage.

**Conclusions:** The second connective tissue removed from the same donor area is at least as good, if not better than the first connective tissue graft.

Purpose: To evaluate the effectiveness of an innovative flap design and the sling and tag (SAT), suturing technique used with the coronally advanced flap (CAF) root coverage procedure.

Materials and Methods: 10 patients from the University Of Michigan School Of Dentistry were included. Clinical parameters including probing depth(PD), clinical attachment level(CAL), keratinized tissue width level(KTW), recession depth(RD), recession width(RW), gingival tissue thickness(GT), plaque index(PI) and gingival index(GI) were recorded at baseline and 6 months and 1 year after surgery. All recession included were Miller’s class 1. A sulcular incision was made. The incisions at the papillae were designed to follow the outline of the papillae. Full thickness flap was elevated. De- epithelialization was performed at the adjacent papillae. Root surface were prepared with high speed carbide bur followed by low speed diamond bur and finished with curettes. A double sling sutures, interrupted sutures and oblique sutures were placed.

Findings: CAF combined with SAT suturing technique resulted in a mean RD reduction of 2.6± 0.5 mm at 1 year post operatively, corresponding to mean root coverage of 93%± 14.8%. The improvement was statistically significant. CALs changed significantly from4.6±0.8 mm to 1.3±0.5mm, a mean gain of 3.3±1.0 mm. this was statistically significant reduction in RW at 1 year when compared to baseline. GT was significantly increased by an average of 0.2±0.3 mm. However, there were no significant changes in KGW, PD, GI and PI.

Conclusion: The newly introduced flap design and SAT suturing technique may enhance the results of CAF for root coverage.

**Purpose:** To compare the results obtained by connective tissue graft (CTG) or CTG plus PRP to achieve clinical outcomes at 1-year follow-up in the treatment of gingival recession; furthermore, the influence of platelet number increase and the level of alveolar bone to the root coverage (RC) and attachment gain (AG) were also investigated.

**Materials and Methods:** Forty patients were selected in this study that had Miller class I or class II recession classifications. Either CTG plus PRP or CTG alone was used to randomly treat each recession. Clinical variable (recession depth, probing depth, clinical attachment level, keratinized tissue width, recession width, localization of the MGJ, plaque index, and gingival index) were measured at different points during the study (baseline, 6 weeks, 6 months, 12 months). In addition, root coverage and attachment gain were also measured.

**Findings:** Probing depth, recession depth, clinical attachment level, keratinized tissue width and recession width were improved in the CTG plus PRP and CTG groups. However, no difference was observed between groups, except recession width. Recession width in the control group was statistically lower than the test group at all follow-up periods.

**Conclusion:** Treatment of recession with CTG or a CTG–PRP combination resulted in favorable clinical outcomes. However, no difference could be found between CTG and CTG plus PRP.

(Limitations – surgical procedures were not performed in a “split-mouth” protocol; different surgical protocols used in the two study groups; limited number of patients)