The clinical outcomes of coronally advanced flap versus bilaminar technique for treatment of multiple gingival recessions: a split-mouth case report with five years follow-up

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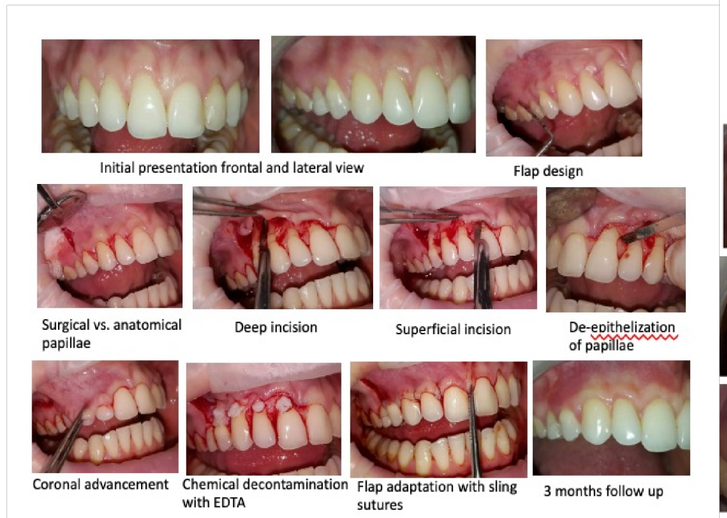
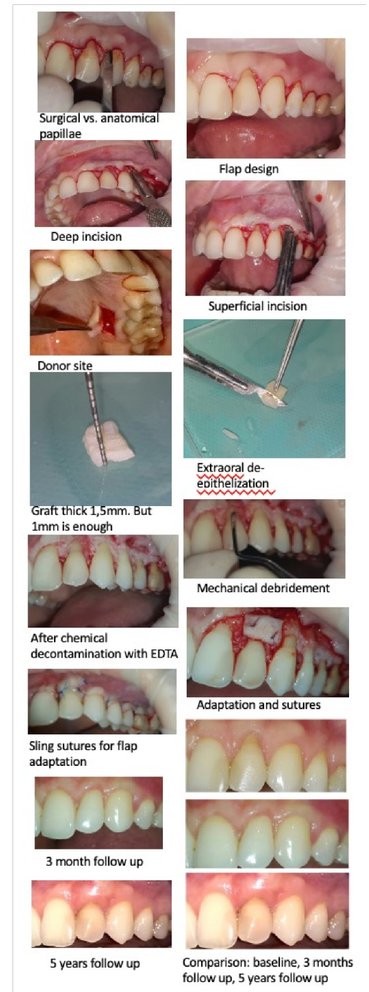
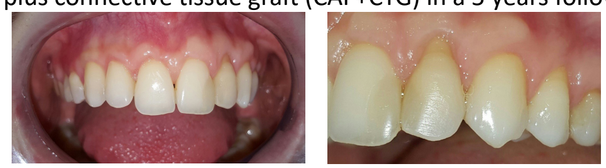
INTRODUCTION: The coronally advanced flap (CAF) alone and the coronally advanced flap with interpositioned connective tissue graft (CAF+CTG) are both clinically efficient therapeutic modalities for treatment of multiple gingival recessions.





AIM: The aim of this split mouth case presentation was to compare the clinical outcomes in terms of complete root coverage (CRC) and buccal soft tissue thickness between the coronally advanced flap (CAF) alone and coronally advanced flap plus connective tissue graft (CAF+CTG) in a 5 years follow up.



MATERIAL AND METHODS: A periodontally healthy 30 years old female patient presented with multiple gingival recessions in the both sides of the upper jaw due to inadequate oral hygiene habits. All recessions fell under Miller 1, Cairo RT-1 class. On the one side, the recessions were treated with coronally advanced envelope flap design (DeSantis, Zucchelli), whereas on the contralateral side an autogenous connective tissue graft was also used in a bilaminar technique manner. The used connective tissue graft from the palatal donor site resulted from extraoral deepithelization of a gingival graft (DGG). The graft was adapted and stabilized to the root surfaces using resorbable 6.0

PGA suture. The flap on the both sides was coronally advanced and secured using 6.0 polyropilene sling sutures. The patient was given oral hygiene instructions.

RESULTS

The patient reported minimal postoperative discomfort, swelling and bleeding at suture removal, two weeks postoperatively. An uneventful clinical healing was presented without any dehiscence and/or necrosis. The first follow up was done 3 months postoperatively, after which the patient failed to show up for follow-up visits until 5 years later. At this timepoint, professional oral hygiene procedure was done. The clinical measurements taken at baseline and at 5 years follow up were recession depth (REC) and probing depth (PD) at midbuccal side. Clinical attachment level was also calculated (PD+REC). Clinical outcomes were evaluated by comparison of these parameter values. In the CAF side, the baseline mean gingival recession was 2,5 mm, while in the final mean gingival recession was 0.8 mm. In the CAF+CTG side the baseline gingival recession was 3.0 mm, while the final gingival recession was 0.4 mm. A better coronal improvement without apical relapse of the gingival margin was observed in the CAF + CTG side. This side also showed greater buccal soft tissue thickness.

CONCLUSION

The conclusion limited to this split- mouth case presentation is that the clinical outcomes from the compared treatment modalities: CAF + CTG (bilaminar technique) and CAF alone, are better in the bilaminar technique side at 5 years follow up.

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