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Laterally Displaced Flap – A Case Report

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ABSTRACT

Gingival recession may cause the patient to feel esthetic discomfort and dentin hypersensitivity. Obtaining predictable and esthetic root coverage has become an important goal of a periodontal surgeon. Even though there is lack of predictability and challenges with soft tissue grafting, an attempt was made to cover an isolated class II (Miller's) defect with laterally displaced flap technique.

KEY WORDS: recession, hypersensitivity, esthetics.

INTRODUCTION

Gingival recession is defined as an apical migration of the gingival margin in relation to the cement-enamel junction (CEJ). Gingival recession may cause the patient to feel esthetic discomfort and dentin hypersensitivity ^[1]. Obtaining predictable and esthetic root coverage has become an important goal of a periodontal plastic surgeon. The search for perfect root coverage technique has taken many approaches. While several surgical procedures have been proved successful and predictable the most popular are pedicle graft and

soft tissue graft. The most ideal soft tissue grafting for isolated recession defect is pedicle graft.

The elimination of some likely etiological factors such as traumatic brushing, local irritants such as calculus, improperly adapted restorations, misplaced orthodontic bands and the adoption of a strict and proper plaque control, with adjustments on the brushing technique, may stabilize the graft in the long term^[10]

The aim of this case report is to describe a case where root coverage was achieved with laterally positioned flap in a class II recession defect (Miller's) ^[3].

CASE REPORT

A 36-year-old male patient reported to our clinics with the complaints of receding gums in lower front tooth since 6 months. Upon examination, the patient presented with a class II recession defect in relation to 31 (FIG. 1). Since an isolated tooth recession was present, laterally displaced flap technique was planned.



Fig 1 – Pre-operative view

After adequate local anesthesia, the recipient site in 31 was prepared and donor site was planned for 41. A full thickness flap was raised up to mucogingival junction and then a partial thickness flap raised in relation to 41 in order to slide the flap laterally to cover 31. Then the graft was secured with sutures (FIG 2) and to prevent the graft from external forces coe-pak was placed. After 10 days pack and sutures were removed.



Fig 2 – Post-operative view during suture removal
Upon removal we could appreciate that the graft was taken up and complete coverage has been obtained with this technique. The donor site healed uneventfully and there was complete restoration of gingival contours and consistency.(FIG 3).



Fig 3 – Post-operative view after 3 months

DISCUSSION

The type of root coverage performed in this case promote several advantages to the recession as there was an esthetic improvement in the region, greater protection against root abrasion, besides reduction of dentin hypersensitivity reported by the patient.

Laterally displaced graft procedure is mainly indicated for isolated recession defects. Though studies have shown that this procedure can be done for increasing the width of attached gingiva. Studies have shown that coverage obtained with this procedure from 50 to 72 % [8]. Moreover it has also been showed that the extent to which the flap establishes the new attachment to the root with the formation of new cementum and embedding new connective tissue fiber has not been settled.

The free gingival connective graft is still considered the most appropriate technique when the aim is to cover the receded tooth. However, the technique of connective tissue graft, needs more than one surgical site^[9]. In this case report the choice was influenced by isolated recession and not an extensive recession.

According to literature for root coverage^[2], the connective tissue graft technique with coronal

repositioning is the most appropriate and with greater predictability, generating less strain on the flap. However in this case report we found out that the technique of lateral repositioned flap generated greater and satisfactory results. This result corroborates with the literature where the authors found better results using laterally displaced flap^[4-8].

Because of unpredictability of this graft, it should be done with meticulous care, ideal situations and care in preparing the sites.(Both recipient and donor). Moreover the donor site should also have adequate width of attached gingiva before the procedure. If the donor site doesn't have adequate width and thickness for grafting then this procedure shouldn't be considered as it would lead to recession in the donor site.

In this case report, as we took due care before and after the soft tissue grafting, we achieved 100% coverage of this graft in the receded tooth.(fig 3).

CONCLUSION

Even though this procedure requires skill and meticulous care during procedure, it is more convenient and simple procedure for isolated defects as donor tissue is adjacent to the defect. Since the adjacent area is the donor it offers excellent blood supply and excellent harmony of color with the adjacent tissues as obtained in this case report.

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