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Semilunar Coronally Positioned Flap for the Treatment with Bilateral Miller's Class I Buccal Gingival Recessions - A Case Report

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Gingival recession is the exposure of root surfaces due to apical migration of gingival tissue margins, gingival margins migrates apical to the cementoenamel junction. Although it rarely results in tooth loss, marginal tissue recession is associated with thermal and tactile sensitivity, esthetic complaints and a tendency towards root caries. This article reviews one of the treatment option for gingival recession, the semi lunar coronally positioned flap with a case report.

Key words: CEJ, cementoenamel junction.

Gingival recession can be caused by periodontal disease, inflammation, improper brushing, incorrect occlusal relationships and dominant roots[1]. These can appear as localized and generalized gingival recession. Recession can occur with or without loss of attached tissue. Gingival recession may effect in accentuated sensitivity because of exposed dentin. Mucogingival recession deformities can be corrected with a variety of periodontal plastic surgical procedures each demonstrating a variable degree of success. Mucogingival surgery as defined by Friedman refers to surgical procedure done to correct relationships between gingival and oral mucosa. Periodontal plastic surgery is defined by 1996 world workshop in clinical periodontics as surgical procedures performed to correct or eliminate anatomic, developmental or traumatic deformities[2].

Various root coverage procedures[5]

The different root coverage procedures are

1. Free gingival autograft, free C/T autograft,
2. Pedicle autograft such as laterally positioned flap and
3. Coronally positioned flap-semilunar pedicle(tarnow)
4. Subepithelial C/T(langer)
5. Guided tissue regeneration,
6. Pouch and tunnel technique.

The different pedicle grafts are rotational flaps like the laterally positioned, double papilla, transpositional flap, and advanced flaps like coronally advanced flaps and semilunar flaps.

Miller's class I and class II gingival recession shows 100% success rate to root coverage procedure[2].

Surgical technique for semilunar coronally positioned flap

Following careful debridement of exposed root surfaces, a semilunar incision is made apically following the curvature of the gingival margins of the teeth exhibiting the gingival recession.the most apical extent of the arc of the incision is typically located in the mucosa. The lateral extent of the

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incisions curves coronally within the keratinized tissue to terminate apical to papillae mesial and distal to the teeth exhibiting the recession and maintaining an adequate distance from the papilla tip in the vertical axis such that the vascularity of the papilla is not compromised. Semilunar incision and intracrevicular incision have been given using tarnow techique. The roots were planned with hand curettes to remove the flecks of calculus and to obtain smooth surface and the flap was positioned as coronally as possible. The postoperative healing after 2 months revealed satisfactory results.

Fig. 1.

Fig. 2.

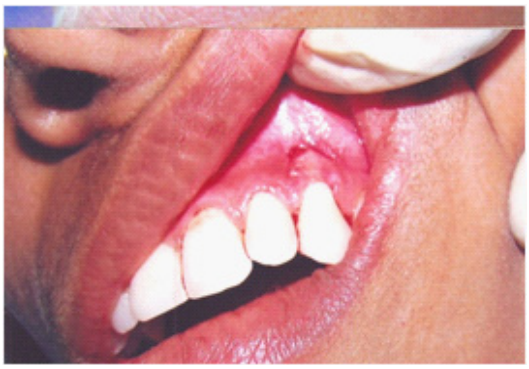

Fig. 3.

Fig. 4.

Fig. 5.

DISCUSSION

The success of root coverage procedures is determined by the amount of recession coverage as assessed by measuring the distance between the cementoenamel junction and the gingival margin pocket depth and clinical attachment loss are also important for success of root coverage procedures.[3] The conditions necessary for the success of root coverage procedures are appropriate case selection with no loss of interdental papilla and interdental alveolar bone adjacent to gingival recession and sufficient interdental papilla adjacent to gingival recession area, sufficient blood supply ensured to donor tissue, root surface covered with thick donor tissue (flap and graft), donor tissue adapted

closely to the recipient site, and sutured. The dead space between the donor tissue and recipient site will interfere with circulation and no severe decay or abrasion on the exposed root. This technique allowed for better control over flap repositioning and also reduces apical tissue retraction while attempting for root coverage [4].

CONCLUSION

Gingival recession is one of the main esthetis complaints of patients.this also expose patients to sensitivity at greater risk for root caries. Mucogingival surgery endeavors to reestablish the periodontium to a healthy state.

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