

ABSTRACT

BACKGROUND: Gingival recession is one of the common mucogingival deformity that can develop root sensitivity, root caries and sometimes esthetic problems. Multiple techniques are available to cover the recession defects. The selection of the surgical technique depends on the local anatomical characteristics and patient's demands. Coronally advanced flap is one of the best technique for the management of recession defects. Modification of this technique provides better postoperative results and complete root coverage. Microsurgical approach provides excellent esthetic results compared to the conventional approach.

AIM: The purpose of the present study was to compare the clinical outcome of coronally advanced flap and modified coronally advanced flap using microsurgery technique in the treatment of Miller's class I & II Gingival Recession defects.

MATERIALS AND METHODS: Twenty-four patients with miller's class I and class II gingival recession were divided into two groups. Group A: Root Coverage procedure done using coronally advanced flap technique using microsurgery. Group B: Root Coverage procedure done using modified coronally advanced flap technique using microsurgery.

The standard clinical periodontal parameters like Plaque index (Silness P. and Loe H. (1964), gingival index Loe H and Silness J (1963), modified sulcus bleeding index (Muhlemann H.R. and Son S. 1971), recession depth, width and width of keratinized gingival measured at baseline, 1, 3 and 6 months. The probing pocket depth and clinical attachment level were evaluated at baseline, 3 and 6 months post-operatively. At 6 months postoperatively, Root coverage Esthetic Score (RES) and root coverage percentage was measured.

RESULTS: Group A and Group B showed statistically highly significant at the sixth month $0.75 \pm 0.45\text{mm}$ (22.5%) and 0.59 ± 0.51 (19.1%) respectively. Mean Root coverage esthetic score was more in modified coronally advanced flap (7.08) than coronally advanced flap (4.5).

CONCLUSION: Modified coronally advanced flap technique is effective than coronally advanced flap in treating the gingival recession defects using microsurgery technique.

KEY WORDS: Gingival recession, Coronally advanced flap, Modified coronally advanced flap, Microsurgery.