

Abstract

ABSTRACT

BACKGROUND:

Buccal gingival recessions in maxillary arch pose a challenge while attempting functional and aesthetic rehabilitation. The aim of this study was to evaluate and compare the outcomes of macroscopically performed Connective Tissue Graft (CTG) with microsurgically performed Coronally Advanced flap (CAF) in the treatment of isolated gingival recessions.

MATERIALS AND METHODS:

Twenty subjects each with a single Miller's Class I gingival recession in maxillary arch were enrolled into control group (Group A- CTG+CAF) and test group (Group B- CAF under microsurgery) of ten each. Recession height (RH), recession width (RW), width of the keratinised tissue (WKT), probing depth (PD) and clinical attachment level (CAL) were measured at baseline, 1 month, 3 months and 6 months post-operatively. Subjective evaluation of morbidity and aesthetics were performed at 1 week and 6 months post-operative period respectively. Root coverage esthetics score (RES) and percentage of root coverage obtained were evaluated objectively at 6 months post-operative period.

RESULTS:

The intragroup comparison of clinical parameters (RH, RW, PD, CAL) showed statistically significant difference from baseline to 6 months postoperatively in both group A and B with no significant difference between the groups.

Assessment of morbidity at one week post-operative interval showed significantly more discomfort and pain in Group A in donor site. Mean percentage of root coverage in Group A was 86.89 ± 20.20 and in Group B was 58.25 ± 41.76 with complete root coverage exhibited by 66% sites in group A and only 37.5% sites in group B. RES values and subjective evaluation of esthetics were higher for Group A (9 ± 1.5 & 4.33 ± 0.86 respectively) which though clinically appreciable was not statistically different from Group B.

CONCLUSION:

Microscopically performed CAF did improve clinical parameters but reported with fewer sites with CRC than CTG+CAF for the treatment of buccal recessions. The merits of CTG under a pedicle flap were superior to microscopically performed CAF which majorly relied on operator's skill set. Well designed Randomized Control Trial's with a larger sample size and longer follow-up will help clarify these findings.

KEY WORDS: RECESSION, CAF, CTG, MICROSURGERY, RES