CLINICAL COMPARISON OF THE EFFECT OF SUBEPITHELIAL CONNECTIVE TISSUE GRAFT AND COLLAGEN MEMBRANE WITH THE ADJUNCT USE OF PLATELET RICH PLASMA IN ROOT COVERAGE PROCEDURES

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ABSTRACT

The purpose of this randomized, controlled trial was to compare the clinical effect of subepithelial connective tissue graft combined with Platelet Rich Plasma (SCTG +PRP ) and that of the collagen membrane (guided tissue regeneration) with the adjunct use of Platelet Rich Plasma (CG+PRP ) in root coverage procedures.

Patient’s Selection

Twelve patients (7 males and 5 females) 21 to 35 years of age, with bilateral gingival recessions were selected. 12 arches in the SCTG +PRP group (group I), and 12 arches in the CG+PRP group (group 2).

Results

In group 1 (SCTG+PRP) treated sites, the percentage of root coverage (Re) achieved was about 84.40%, regarding group 2 (CG+PRP) treated sites, the percentage of root coverage achieved was 80.8%, as for the increase in Keratinized Gingival Width (KGW) group 1 showed a 221.7% gain, whilst group 2 showed a 187.5% gain. Considering the Clinical Attachment Level (CAL) group 1 showed a 72.7% gain and group 2 showed a 68.6% gain. For the Probing Pocket Depth (PPO) reduction group 1 showed 61.1% reduction and group 2 showed 68.1% reduction. Hence all groups showed a statistical significant difference when baseline data were compared to that of the 6 months data, however, when both groups were compared together no statistical significant difference was noted between both groups. Nevertheless group 1 showed better clinical results regarding RC, KGW gain and CAL gain, but group 2 showed better PPO reduction.

Conclusion

The results of the study demonstrated that both techniques, either an autogenous connective tissue graft (SCTG) soaked with platelet rich plasma (PRP) or a collagen membrane (CG) soaked with platelet rich plasma (PRP), are effective in the treatment of shallow gingival recession. However, group 1 showed better results regarding the % of RC and the gain in both KGW and CAL, whereas, group 2 showed better PPO reduction.