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 groupl (SCTG+PRP) treated sites, the percentage of root coverage (Re) achieved was about *84.40/0*, 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 I showed a 221.7% gain, whilst group2 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 group2 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 group1 showed better clinical results regarding RC, KGW gain and CAL gain, but group2 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, group2 showed better PPO reduction.

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