"COMPARISON OF β-TRICALCIUM PHOSPHATE AND AUTOGENOUS BONE GRAFT WITH BIOABSORBABLE MEMBRANE AND AUTOGENOUS BONE GRAFT IN THE TREATMENT OF INTRABONY PERIODONTAL DEFECTS: A CLINICO-RADIOGRAPHIC STUDY."

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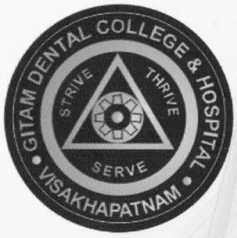

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ABSTRACT

Background and Objectives: To compare clinically and radiographically, the regenerative potential of β-Tricalcium phosphate and autogenous bone graft with bioabsorbable membrane and autogenous bone graft in the treatment of intrabony periodontal defects.

Methods: A total of 24 sites from 12 patients showing bilateral or contralateral infrabony defects were selected and the sites were randomly divided into Experimental Site A (CERASORB® + Autogenous bone graft) and Experimental Site B (BIOMEND™ + Autogenous bone graft) by using split mouth design. The clinical parameters like Plaque Index, which was recorded at 1, 3, 6, 9 months, and Probing pocket depth, Clinical attachment level and Gingival recession were recorded at baseline, 6 months and 9 months. Radiographic evaluation was carried out to evaluate the defect fill, change in alveolar crest height and percent defect fill at 6 months and 9 months.

Results: All 12 patients returned regularly on recall intervals till the completion of the study. Both the experimental groups showed clinically and statistically significant reduction in probing pocket depth and gain in clinical attachment level. On comparison no statistical significance was observed between the two groups. Radiographically, in Site A there was significant defect fill of 69.58% and 79.24% at 6 months and 9 months respectively. Where as in Site B, a defect fill of 71.29% and 82.77% was seen at 6 months and 9 months respectively.

***Interpretation & Conclusion*:** Both groups showed the potential of enhancing the periodontal regeneration; however on comparison between the two groups, the

results obtained of the BIOMEND™ + Autogenous bone graft group were slightly better, although statistically not significant.

Keywords: *periodontal regeneration, CERASORB®, guided tissue regeneration, BIOMEND™, composite graft, autogenous bone graft, intrabony defect*