## ASSESSMENT OF GINGIVAL BIOTYPE AND ITS INFLUENCE ON THE TREATMENT OUTCOME IN PATIENTS UNDERGOING PERIODONTAL FLAP SURGERY - A CLINICO-RADIOGRAPHIC STUDY



By

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## **ABSTRACT**

<u>Background:</u> Gingival morphology of the maxillary anterior region plays an important role in determining the final esthetic outcome. There exists different *periodontal entities or so called "gingival biotype"*. Tissue biotypes have been associated with the outcomes of periodontal therapy, soft tissue root coverage and recently implant esthetics.

<u>Aims & Objectives:</u> To evaluate the gingival biotype & to assess its influence on the surgical outcome in patients undergoing periodontal flap surgery. The amount of bone loss occurring was also evaluated.

Materials & Methods: 30 systemically healthy individuals (22- 50 years) were included in the study. Based on the transparency of the UNC 15 probe through the gingival margin they were divided into thick; if the outline of the probe was not visible through the gingival margin, or thin; when the outline was visible through the gingival margin. Following which the surgical procedure was performed. The GI, PI, GM, GT, PD, CAL, KT were evaluated at baseline, 3, 6, 9 months. Radiographic assessment was done at baseline & 9 months.

Results: Intra group comparisons in both the thick & thin biotype group showed clinically significant differences. Statistically significant difference was seen between the thin & thick groups in relation to position of the gingival margin & radiographic bone loss. Bone loss & recession was greater in the thin compared to the thick biotype group.

Conclusion: Within the limitation of the study it could be concluded that thinner biotype had greater amount of recession & bone loss compared to the thick biotype. Transparency of the probe method could be used as an effective chair side diagnostic aid in the assessment of the gingival biotype.

**Keywords:** Gingival Biotype; Gingival margin; Bone loss; Recession.