



Evaluation of gingival margin position in thick and thin gingival biotypes after periodontal therapy in chronic periodontitis patients

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Abstract:

Background: Non-surgical periodontal therapy (NSPT) and surgical (OFD) procedures result in the apical shift of gingival marginal position (GMP) leading to aesthetic and sensitivity problems. Gingival biotype (Gb) is one of the factors that influences outcomes of periodontal treatment. To date, it is unclear as to how much change in GMP occurs in either thick (TK) or thin (TN) Gb after periodontal therapies. The objective of the present randomized controlled trial was to determine and compare the changes in GMP in TK and TN Gb after NSPT and OFD.

Materials and Methods: A total of 52 healthy patients with PPD \geq 5-7mm of were included in the present study. The gingival thickness was measured by the transgingival probing technique, and categorized into two groups: thin (TN) < 1mm and (TK) > 1mm. The procedures are randomized based on computer generated random number. Half of the patients underwent NSPT and half in OFD in both TK and TN Gb patients. The GMP was measured in mesiobuccal (MB), mid-buccal (Mid B) and distobuccal (DB) sites at baseline, 1, 3, and 6 months. The periodontal pocket depth (PPD), and clinical attachment level (CAL) were measured at baseline, 3, and 6 months. Independent sample t-test was used for inter group comparisons and paired t-test was for intra group comparisons.

Result: The mean difference of GMP in mid buccal site between NSPT-TK and NSPT-TN group from baseline to 1 month was 0.22 ($p < 0.05$) whereas the mean difference of GMP in mid buccal site between OFD-TK and OFD-TN was 0.15 ($p < 0.05$). The mean difference of GMP in



mid buccal site between NSPT and OFD from base line to one month was 0.18 ($p < 0.05$).

Conclusion: The apical shift of gingival margin position was highly significant from baseline to 1, 3 and 6 months in both thick and thin gingival biotype for both NSPT and OFD groups.

Biography:

Sajeev Shrestha is Periodontist by profession. Currently, he is Associate Professor in Department of Periodontology and Oral Implantology at BP Koirala Institute of Health Sciences, Nepal. He did Master of Dental Surgery (MDS) in Periodontology and Oral Implantology from BP Koirala Institute of Health Sciences in 2014. He has a keen interest on serving a community by providing an oral hygiene instructions and dental camp in rural part of the country.

Publication of speakers:

1. Vinay Marla, Ashish Shrestha, Khushboo Goel , Sajeev Shrestha, "The Histopathological Spectrum of Pyogenic Granuloma: A Case Series", Case Rep Dent, 2016.