COMPARISONE BETWEEN TWO CROWN LENGTHENING
TECHNIQUES FOR THE MANAGEMENT OF ESTHETIC ZONE
SHORT CLINICAL CROWNS

*Fahad Alsulaimani
**Mossad Al-Sherbini
***Amr Mahros

Abstract

This clinical study was designed to evaluate the clinical outcomes and the periodontal tissue reactions following surgical crown lengthening alone and in comparison with a combined orthodontic-periodontic therapy for the management of esthetic zone short clinical crowns. Twenty patients contributing at least single tooth with short clinical crown at the esthetic zone, completed the study. Ten patients in group 1 received only a surgical crown lengthening by using a technique of apically repositioned flap with osteotomy and the other ten patients in gingival received a combined orthodontic-periodontic therapy as a crown lengthening technique. Clinical parameters (pocket depth, clinical attachment level, amount of keratinized gingiva, amount of gingival recession and the changes in root-to-crown ratios) were assessed for the two groups at baseline, 3, 6, and 12 months postsurgically to evaluate the clinical outcome following each procedure and also to compare the clinical effects of the two techniques on the periodontal parameters.

In conclusion: this study showed that there was a significant differences between group 1 and group II in all the clinical parameters at 12 months postsurgically. These results indicate that the use of a combined therapy of orthodontic extrusion and minor periodontal surgical approach for esthetic zone short clinical crowns was more accepted esthetically and not compromised the periodontal supporting structure of the extruded tooth or its adjacent teeth.

*Assistant Professor Orthodontic Department, Faculty of Dentistn. Kine Abdulaziz University.
**Professor of Periodontology, Faculty of Oral and Dental Medicine. Penodonlolosy Department, Cairo University.
***Professor of fixed prothodontic, Faculty of Dentistry, Alexandria University