

Clinical Comparative Study of Collagen Membrane and Space maker Usage versus Sub epithelial Connective Tissue Graft (modified method) in Gingival Recession Treatment

Amini Sh¹, Golestaneh H¹, Mir Emadi SA², Teymouri F³

¹Assistant professor Periodontics Dept, School of Dentistry, Azad Islamic University of Isfahan (Khorasgan), Isfahan, Iran

²Professor, Periodontics Dept, Tehran University of Medical Sciences

³Postgraduate Student, Periodontics Dept, School of Dentistry, Azad Islamic University of Isfahan (Khorasgan), Isfahan, Iran

Abstract

Background and Aim: Gingival recession is defined as exposure of tooth root surface due to apical movement of the gingival margin; different methods have been used for its treatment. This study was performed to clinically compare the changes observed in periodontal clinical indices between the two methods adopted in treatment of gingival recession, GRT and CTG.

Materials and Methods: In this experimental study, 24 cases of gingival recession were selected in 12 patients who had Miller's class I and/or II gingival recession in their canines or premolars. Twelve areas were treated with CTG and 12 with GTR method. The studied indices including depth and width of recession, clinical attachment level, probing depth, and width of keratinized gingiva were measured before treatment and 1, 2, 3, and 6 months later. Data were analyzed using Wilcoxon, T-paired and ANOVA statistical tests.

Result: Both CTG and GTR methods led to significant decrease in depth of gingival recession ($P=0.035$), width of recession ($p=0.005$), Improvement in clinical attachment level ($P=0.05$) and width of keratinized tissue ($P=0.0001$). But no significant difference was noticed between two groups regarding probing depth ($P=0.3$).

Conclusion: Although both treatment methods considerably improved the treatment of gingival recession, CTG method was superior to GTR for increasing the width of keratinized tissue and increasing the clinical attachment level.

Keywords: *Gingival recession; Guided tissue regeneration; Periodontal*