

Sub-Epithelial Connective Tissue Graft With or without Enamel Matrix Derivative- A 3 –Year Prospective Clinical Trial

Faustino Tino Mercado^{1*}, Stephen Hamlet² and Saso Ivanovski³

¹School of Dentistry and Oral Health, Griffith University, Australia

²Menzies Health Institute Queensland, Griffith University, Australia

³School of Dentistry, University of Queensland, Australia

Objective/ Aim: The aim of this study was to compare the clinical and patient-centred outcomes of subepithelial connective tissue graft (CTG) with and without enamel matrix derivative (EMD) in the treatment of Class I-II Miller periodontal recession defects.

Materials and Methods: This prospective clinical study evaluated 80 patients for a 3- year follow up period in a private periodontal practice. 144 teeth were divided into two groups: Test Group (CTG with EMD – 80 teeth) and Control Group (CTG only - 64 teeth). Clinical (Recession (REC), Keratinized Tissue (KT) width, % root overage) and patient centered outcomes (Pain Visual Analogue Scale (P-VAS)) were compared between the two groups.

Results: At the three year follow up, complete root coverage was achieved in 64.2% of the Test group and 52.9% of the Control group. The REC in the test group reduced significantly (4.57 ± 1.55 to $.5 \pm .56$) when compared to control group (4.26 ± 1.33 to $.92 \pm .54$) ($p < .01$). There was also significant increased in KT width in the test vs. the control group at 36 months ($2.47 \pm .58$ vs. $1.72 \pm .36$) ($p < .01$). There was less pain reported at the one week follow-up post- surgery in the test group using the Pain-Visual Analogue Scale ($p < .01$).

Discussion: The addition of EMD appears to result in improved root coverage outcomes and higher amounts of keratinized tissue width 36 months after treatment. The adjunctive use of EMD also resulted in significantly reduced pain 7 days after the surgery.

Biography:

Faustino Tino Mercado finished his Postgraduate Diploma in Oral Pathology at the University of Queensland in 1997 and went on to finish his Masters in Dental Science in Periodontics in the same University in 2000. He was involved in the dental undergraduate and periodontal postgraduate training at the University of Queensland and more recently at the University of Sydney.