

Conclusion: Within the limits of our study, significant contribution of the periodontal treatment on the frequency of occurrence and healing time of oral ulcer was observed in BD patients.

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Autogenous cortical bone particles and enamel matrix derivative in the treatment of deep intraosseous defects: a 12-month case series

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The aim of the present study was to investigate the effectiveness of a regenerative procedure based on supracrestal soft tissue preservation in association with combined autogenous cortical bone particles (ACBP)/enamel matrix derivative (EMD) application in the treatment of non-self supporting periodontal intraosseous defects. Thirteen consecutively-treated patients, seven females and six males, aged 30–65 years, two smokers, were included. A total of 14 deep, 1–2 wall intraosseous defects were selected. Pocket probing depth (PPD), clinical attachment level (CAL), and gingival recession (REC), at baseline and 12 months after surgery, were recorded. PPD amounted to 9.1 ± 1.6 mm before surgery, and decreased to 4.0 ± 1.4 mm post-surgery (PPD reduction: 5.1 ± 1.7 mm, $P < 0.0000$). CAL varied from 10.3 ± 1.5 mm pre-surgery to 5.4 ± 1.7 mm post-surgery, with a CAL gain of 4.9 ± 1.8 mm ($P < 0.0000$). REC shifted from 1.1 ± 0.9 mm at baseline to 1.4 ± 1.1 mm after surgery, REC change being 0.3 ± 0.8 mm ($P > 0.05$). Our results supported the effectiveness of a regenerative procedure based on supracrestal soft tissue preservation combined with ACBP/EMD in clinically and statistically improving soft tissue conditions of non-self supporting periodontal intraosseous defects.

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Free gingival grafting and gingival margin over 7 years

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Aims: (i) To assess whether the areas with small amounts of attached gingiva are more prone to gingival recession and loss of clinical attachment level (CAL) than areas with gingival grafting to increase the width of attached gingiva and (ii) whether gingival grafting prevents recession and loss of CAL.

Patients and methods: Twenty females and six males, mean age 33 years at baseline (BL), with midvestibular singular or multiple gingival recessions in the mandible had undergone 28 free gingival grafting from palatal donor sites to increase the width of attached gingiva. A group treated by gingival grafts consisted of 98 teeth at BL and 35 teeth after 7 years. A control group was composed of 35 teeth at BL and also 7 years later. Using periodontal probe we assessed the following parameters: probing depth (PD), CAL, gingival margin regarding cements/enamel junction, width of keratinized gingiva and bleeding on probing (BOP). The statistical analysis of differences in each parameter between the 7 years and BL was performed using Wilcoxon signed-rank test and for BOP using McNemar's test.

Results/Conclusion: We found out: (i) statistically significant gain of CAL and reduction of recession on test group ($P < 0.05$); (ii) significant reduction of PD ($P < 0.05$) and non significant BOP on both groups. The areas with small amount of attached gingiva seems to be more prone to gingival recession in spite of non significant change of CAL.

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Effect of adjunctive local or systemic metronidazole on mmp-8 and timp-1 levels in gingival crevice fluid in chronic periodontitis patients

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The aim of this study was to evaluate the effects of initial periodontal treatment combined with local/systemic use of metronidazole on clinical parameters and gingival crevice fluid (GCF) levels of matrix metalloproteinase-8 (MMP-8) and tissue inhibitor of metalloproteinase-1 (TIMP-1) in chronic periodontitis patients. Out of 30 subjects, 10 received scaling and root planning (SRP), 10 adjunctive local metronidazole (SRP + LM) at 0 to 7 days and 10 adjunctive systemic metronidazole for 10 days (SRP + SM). Plaque index (PI), sulcus bleeding index (SBI), probing depth (PD) and relative attachment level (RAL) were recorded, GCF samples were collected before and 49 days after treatments. MMP-8 and TIMP-1 were assessed by enzyme linked immunosorbent assay. Significant improvements in PI, SBI, PD were observed in all groups ($P < 0.01$), only SRP + LM group showed significant attachment gain ($P < 0.05$). The difference in attachment gain between the SRP and SRP + LM groups was significant ($P < 0.05$). Marked decrease in MMP-8 level and increase in TIMP-1 level were detected in all groups while the SRP-LM group only showed a significant change in the TIMP-1 ($P < 0.05$). The results indicate that initial periodontal treatment with and without use of local/systemic metronidazole improved clinical parameters and GCF levels of MMP-8 and TIMP-1 in chronic periodontitis patients. Furthermore, local administration of metronidazole may have an additional effect on attachment gain and TIMP-1 level change.

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Surgical and non-surgical treatment of periodontal diseases: two modalities of treatment

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Aim: A clinical trial was performed to compare the outcomes of non surgical and surgical therapies in subjects with a recurrent periodontal disease.

Material and methods: As basic therapy, 32 patients included in this trial had previously been treated by a non surgical root planning (RP). At active therapy, remaining inflammatory pockets were treated by a split mouth design and each quadrant was randomly assigned to one of both therapies: surgical modified Widman flap (SU) and RP. After active therapy all subjects were provided with supportive periodontal therapy (SPT) every 3 months, for 2 years. The clinical parameters evaluated were: reduction in probing pockets depth (rPPD) with an electronic Florida probe, gain in clinical attachment level (gCAL), bleeding on probing index EASTMAN (BoPI) and plaque index O'Leary (PI).

Results: Both therapies were found effective for the treatment of periodontitis in deep (≥ 7 mm) and moderate pockets (5–6 mm); in smokers (S), formerly smokers (FS) and non smokers (NS). At deep pockets, SU seemed to be more effective than RP in terms of gCAL and rPPD. At moderate pockets, gCAL seemed to be more effective with RP. The S group showed less marked results. The FS and NS groups showed the same results. PI and BoPI were significantly reduced with both therapies.

Conclusion: Both SU and RP therapies seem to be effective methods for the treatment of recurrent periodontitis. In the treatment of deep pockets, SU therapy resulted in greater rPPD and gCAL.