OSSEOUS RESECTIVE SURGERY WITH AND WITHOUT FIBRE RETENTION TECHNIQUE IN THE TREATMENT OF SHALLOW INTRABONY DEFECTS: 3-YEARS ANALYSIS OF SOFT TISSUE RE-GROWTH

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Soft-tissue healing following osseous resective surgery is a critical issue in periodontal therapy. In fact, variations in gingival margin position, time necessary for complete healing and soft-tissue stability are important factors, especially when prosthetic treatment is scheduled. Heterogeneity among the surgical procedures may explain, at least in part, the variability in terms of amount of soft-tissue rebound following surgery.

The aim of this longitudinal observational study was to compare the soft-tissue re-growth after two different techniques for osseous resective surgery: the patients were selected 3 years before for a split-mouth clinical trial aimed to compare the clinical effectiveness of Apically Positioned Flap with Fibre Retention Osseous Resective Surgery (FibReORS) versus Osseous Resective Surgery (ORS) in the treatment of periodontal pockets associated with intrabony defects ≤3 mm at posterior natural teeth.

Twenty-six posterior sextants requiring osseous resective surgery were selected in 13 chronic periodontitis patients: 13 sextants were randomly assigned to ORS and 13 to FibReORS. Patients were recalled at 36 months postoperatively to assess clinical parameters. Clinical evaluation of probing depth (PD), gingival recession, clinical attachment level and quantity of keratinized tissue were recorded by an experienced and calibrated examiner. They were compared with 12-month records which were collected by the same clinician.

At 12-month examination PD changes did not significantly differ between the experimental groups. At 36 month examination PD values significantly increased for both groups, but remained in a physiological range. At 12 months ORS group showed significantly (p < 0.001) greater Recession and Clinical Attachment Level. At 36 months the Clinical Attachment Level remained stable for both groups. Recession values decreased, without a significant difference between the test and the control sextants. The amount of keratinized tissue significantly increased in both groups.

After 3 years mean PD values increased when compared to 12-month values but remained physiological, so both techniques demonstrate to be effective in maintaining a periodontal health in the long term. The creeping of soft tissues continues along the time, as discussed by Kaldahl in 1996, but the differences between the 2 groups decreased in terms of recession. The amount of keratinized tissue augmented, sign of periodontal stability and soft tissue health.