

**Background & Aim:** To evaluate the use of amnion chorion allograft (ACM) and demineralized freeze-dried bone allograft (DFDBA) versus open flap debridement (OFD) in treatment of periodontal intrabony defects.

**Methods:** Twenty-four periodontal intra-bony defects were randomly allocated into two groups; Group A (intervention) included 12 defects treated by ACM with DFDBA and Group B (control) included 12 defects treated by OFD. Plaque index, gingival index, PPD and CAL were recorded at baseline, 3 and 6 months postoperatively. Radiographic measurements of bone defect area (BDA) were recorded at baseline and 6-months postoperatively.

**Results:** Both groups showed statistically significant PPD reduction, CAL gain at 3 and 6 months, as well as percentage of BDA change at 6 months, when compared to baseline and to each other, favoring the ACM+DFDBA group. The ACM+DFDBA group further demonstrated PPD reduction of 2.83 ( $\pm 0.58$ ) mm, CAL gain of 2.83 ( $\pm 0.94$ ) mm and % change in BDA of 40.25% ( $\pm 9.93$ ) at 6 months. While the OFD group, the PPD reduction observed was 1.92 ( $\pm 0.67$ ) mm, CAL gain of 1.83 ( $\pm 0.58$ ) and % of BDA change of 18.92% ( $\pm 7.18$ ) at 6 months.

**Conclusions:** Regenerative therapy using ACM with DFDBA as well as OFD solely provided significant improvement in all parameters, with a significantly enhanced results in the ACM with DFDBA group.

#### PR169 | The Use of Biphasic Calcium Sulphate in Association With a Bovine Xenograft in the Treatment of Deep Intra-Osseous Periodontal Defects: A Retrospective Study

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**Background & Aim:** Periodontitis is a chronic inflammatory destruction of the tissues that surround the teeth. Several non-surgical and surgical therapies were proposed for the resolution of intrabony defects. The purpose of the present study was to evaluate the long-term results for the reconstructive therapy of periodontal intrabony defects using a composite graft, consisting of a mixture of equal parts of deproteinized bovine bone and biphasic calcium sulphate.

**Methods:** A retrospective study was conducted with a 3 and 5-year follow-up, on patients who had at least one tooth presenting a contentive or non contentive bone defect and pocket depth (PPD) greater than 6mm, and who underwent periodontal regenerative surgery.

**Results:** Mean PPD had a significant reduction from the baseline to the 1-year follow-up equal to 6.06  $\pm$  2.03mm; average Clinical Attachment Level (CAL) was significantly reduced by 5.25  $\pm$  1.59mm; mean Recession (REC) increased by 0.72  $\pm$  1.03mm. A statistically significant bone gain of 4.18  $\pm$  1.52mm was also found. Furthermore, no statistically significant differences were found between 1 and 2 walls or 2 and 3 walls defects, or between narrow angle (<20°) or wide angle (>30°) defects. The results obtained at 1 year remained stable after the 3 and 5 years, as no statistically significant changes were recorded for PPD, REC, CAL and bone defect fill, also according to other studies in the literature.

**Conclusions:** The addition of biphasic calcium sulphate to the deproteinized bovine graft seems to allow predictable filling percentages even in non-contentive defects with an angle greater than 30° and with 1–2 walls. Further studies are needed to confirm if this protocol can represent a valid alternative for reconstructive periodontal therapy.

#### PR170 | Patient Reported Outcomes in Resective Treatment of Furcation Lesions

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**Background & Aim:** Resective periodontal surgery in molars with furcation lesions, including tunneling and/or root resection is an effective treatment option with favourable long-term survival rates. After treatment an increase in gingival recession is expected along with the necessity to adjust oral hygiene methods. Patient perception related to these treatment has not been extensively described in the literature. This cross-sectional study aims to describe patient reported outcomes following resective periodontal surgery in molars with furcation lesions, over an approximately period of four years.

**Methods:** Patients diagnosed with periodontitis and under periodontal therapy were recruited from two private practices. After steps 1 and 2 of periodontal therapy, patients underwent periodontal resective surgery involving furcation lesions treatment. Subsequently, patients were enrolled in periodontal supportive therapy comprising visits at 3–6 months intervals, according to individual risk. Patient related outcomes were assessed at follow-up through a questionnaire inquiring treatment preference (periodontal treatment vs. dental extraction). For levels of discomfort during function and access to perform oral hygiene responses were quantified using a categorical scale with the following options: very low, low, medium, high, and very high.

**Results:** Most patients were diagnosed with Stage III (86.4%) and Grade C (63.6%) periodontitis. Resective periodontal surgery was performed in 36 molars in 22 patients. Molars with furcation lesions received root amputations ( $N=7$ ), tunneling ( $N=27$ ) or a combined treatment ( $N=2$ ). At a mean follow-up of 4.3  $\pm$  2.8 years, all patients expressed a preference for surgical treatment over dental extraction. Low discomfort during function was referred for 36.1% of teeth, while 19.5% were reported as experiencing high discomfort. Most of teeth (86.2%) were deemed accessible for oral hygiene.

**Conclusions:** Patients expressed high levels of satisfaction and the majority of teeth were reported to be comfortable during function and accessible for maintaining oral hygiene, following resective periodontal surgery on molars with furcation involvement.

#### PR171 | A 'Closed' Surgical Technique for the Treatment of Residual Intrabony Defects Versus Papilla Preservation Flap Techniques. Preliminary Findings

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