

EFFECT OF TOPICAL ALENDRONATE IN PERIODONTAL DEFECTS: SYSTEMATIC REVIEW AND META-ANALYSIS

Arena C.¹, Zhurakivska K.¹, Caponio V. C. A.¹, Lo Russo L.¹, Mauceri R.², Mascitti M.³, Lo Muzio E.⁴, Panzarella V.², Troiano G.¹

¹Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy

²Sector of Oral Medicine, Department of Surgical, Oncological, and Oral Sciences (DiChirOnS), University of Palermo, Palermo, Italy

³Department of Clinical Specialistic and Dental Sciences, Marche Polytechnic University, Ancona, Italy

⁴School of Orthodontics, University of Ferrara, Ferrara, Italy

Aim: considering the emerging role of host-inflammatory response in treatment of periodontitis and the antiresorptive and osteostimulative properties of bisphosphonates several studies are focusing their attention on the role of alendronate as an adjunctive to non-surgical periodontal therapy.

This systematic review and meta-analysis aimed to investigate the role of alendronate combined with NSPT in reducing probing pocket depth, improving clinical attachment level and reducing bone defect depth in periodontal intraosseous defects.

Methods: RCTs with more than 6 months follow-up were included in this study. Risk of bias assessment was performed

using the Cochrane collaboration tool. In addition, meta-analysis and trial sequential analysis were used to aggregate the available evidences.

Results: seven studies met the inclusion criteria and were included in the systematic review. All the included studies were RCTs comparing the combination therapy of SRP+Alendronate gel 1% (test group) with SRP alone (control group). Topical application of alendronate in addition to NSPT significantly improved PD and CAL.

Conclusion: local application of alendronate may confer a beneficial effect in combination with NSPT even if long term studies are needed to confirm these results.

CORONALLY ADVANCED FLAP TECHNIQUE FOR THE TREATMENT OF MULTIPLE RECESSION

Butti A., Guerrieri P., Vella M., Rossi F., Calò A., Porro A.

Department of Biomedical, Surgical and Orthodontic Sciences, University of Milan, Milan, Italy

Aim: the creation of a coronally advanced flap is the gold standard treatment in case of a multiple gingival recessions. This surgical approach allows to have a multiple root coverage using the keratinized tissue that the patients already presents, positioned it apically to the recession.

Methods: a 45 years old patient reports strong pain symptomatology and aesthetic request related to recessions on elements 16, 15, 13. The creation of the flap begins by creating oblique paramarginal incisions that should converging to the fulcrum tooth, that is the axis of rotation around which the flap rotates and displaces coronally.

The oblique incision allows the apex of each surgical papilla to be moved correctly to the apex of the corresponding anatomical papilla. The flap in the region of the marginal gingival tissue

is full thickness instead at the apical level the detachment is at partial thickness. Is necessary the disepithelialization of the anatomical papillae, in order to create a periosteum bed to receive the surgical papillae.

suture allows the anchoring of surgical papillae to the underlying connective interdental beds.

Results: from clinical re-evaluation, done one year after the surgery, is evident how the keratinized displaced coronal tissue has remained stable over time and has increased in terms of volume and crown-peak amplitude without leaving unsightly scarring results.

Conclusion: in case a clinician has to deal with multiple recessions the coronally advanced flap can be considered adequate and satisfactory with a good outcome after a year.