

BACKGROUND: Gingival recession in the anterior region can be an aesthetic concern for patients.

A 59-year-old female patient, with Localised Periodontitis Stage III Grade C, presented with a localised 3mm RT3 recession defect on #42 with dentinal hypersensitivity. The periapical radiograph demonstrated 60% horizontal bone loss on #42 and an impacted #43 (Fig 1). The patient's main concerns were to address the gingival recession defect and periodontal disease.

AIM: The aim of treatment to modify the periodontal phenotype by increasing the thickness of the gingival tissues, hence allowing greater ease in performing oral hygiene procedures, and preventing further gingival recession and associated dentinal hypersensitivity.



Figure 1: Pre-operative clinical and radiographic presentation

MATERIALS & METHODS:

Two rounds of non-surgical debridement were performed, followed by the mucogingival surgery. The root surface of #42 was instrumented with Gracey curettes. A trapezoidal split thickness flap was raised and was apically repositioned. The mucosa was undermined to create a pouch for the insertion of the soft tissue graft. Next, a partly epithelialized free gingival graft (PE-FGG)¹ was harvested via the technique proposed by Langer and Langer (1985). The apico-coronal dimension of the epithelial band of the PE-FGG corresponds to the height needed to cover the exposed root surface and establish the ideal position of mucogingival junction (Figure 2).

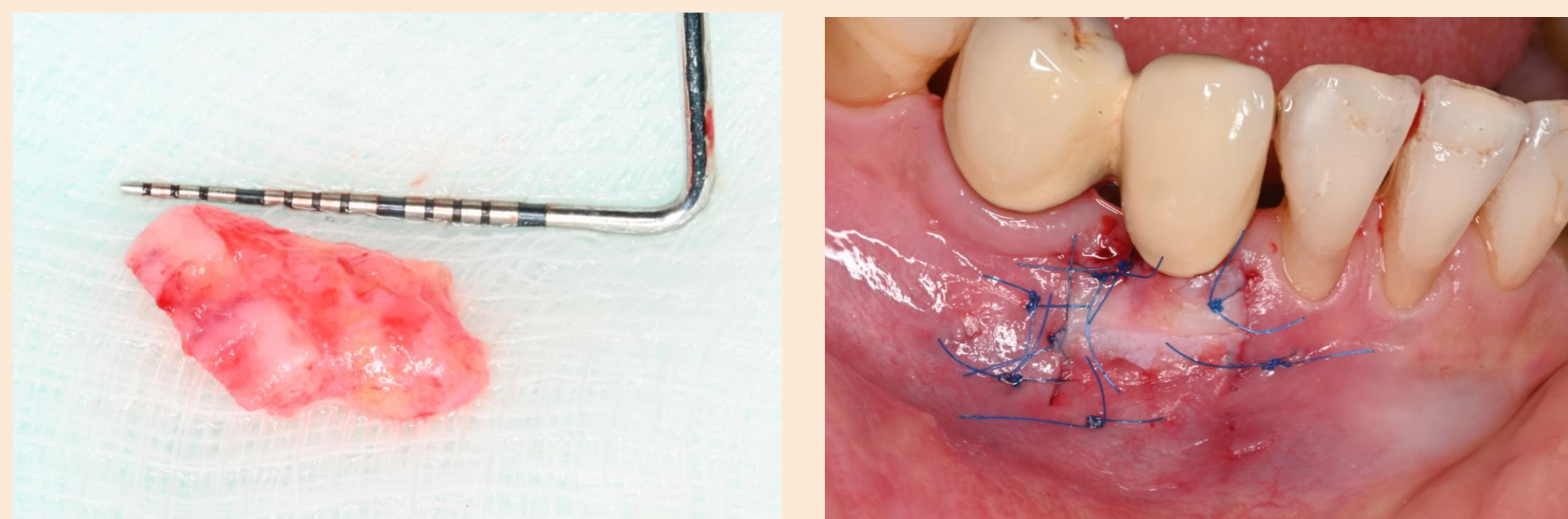


Figure 2: (left): The PE-FGG was harvested from the palate includes a 3mm band of epithelium. (right): The PE-FGG was sutured to the site with epithelial portion exposed and de-epithelialised portion covered by the split thickness flap.

RESULTS: The healing was uneventful. A reduction of recession depth by 2mm and increase in soft tissue volume was observed at 1-year post-surgery (Figure 3). The patient also reported a reduction of dentine hypersensitivity and satisfaction with the aesthetic outcomes.



Figure 3: One-year post-operative presentation of #42

CONCLUSIONS: This technique may be a suitable alternative to conventional FGG¹ as it overcomes the aesthetic deficiencies and increases the chances for root coverage in a tooth with compromised periodontal support², thus satisfying the patient's concerns and achieving the objectives of the surgery.

DISCLOSURE OF INTEREST: None to declare

REFERENCES: ¹ Cortellini, P., Tonetti, M., & Prato, G. P. (2012). The partly epithelialized free gingival graft (pe-fgg) at lower incisors. A pilot study with implications for alignment of the mucogingival junction. *Journal of clinical periodontology*, 39(7), 674–680.

² Agudio, G., Chambrone, L., & Pini Prato, G. (2017). Biologic Remodeling of Periodontal Dimensions of Areas Treated With Gingival Augmentation Procedure: A 25-Year Follow-Up Observation. *Journal of periodontology*, 88(7), 634–642.