



## **Subepithelial Connective Tissue Graft for Root Coverage. A Case Report with 1 Month Follow-Up**

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### **Introduction**

Esthetics is becoming an important concern in dentistry. Harmonious and symmetric alignment of the teeth with a consistent shape, size and color is essential, and the harmonious gingival morphology has been emphasized.

Gingival recession has been defined as the apical displacement of the gingival margin. It is one of the soft tissue problems faced by dentists and patients. It is frequently associated with esthetic concerns, fear of tooth loss and root hypersensitivity.

Histologically, the collapse of gingival tissue results in attachment loss by destruction of the periodontal connective tissue and alveolar bone. The most frequent etiologic factors associated with recessions are inflammatory periodontal disease, traumatic tooth brushing and inadequate attached gingival dimensions.

In the last three decades, a number of techniques have been proposed to obtain root coverage and to improve patients' aesthetics, quality of life and oral health including

- a) Pedicle flaps (PF)
- b) Free soft tissue autografts (FSTA),
- b) Subepithelial connective tissue graft (SCTG)
- d) Coronally advanced flaps (CAF),
- c) SECTG plus CAF
- f) Guided tissue regeneration (GTR).

The subepithelial connective tissue graft (SECTG) technique remains one of the most common and accepted procedure for root coverage.

The advent of SECTG, as described by Langer and Langer, predictably increased the root coverage of Miller's Class I and II recession to around 90%. Due to superior esthetics and the consistent results achieved, SECTG has been clearly recognized as a highly effective means of covering recession defects.

Harvesting of SECTG can be done from the palate, maxillary tuberosity or edentulous ridges. The palate remains the most common donor site.

The harvesting of SECTGs produces less postoperative morbidity than free gingival grafts. Many modifications of the techniques to harvest SECTGs have been proposed, each subtly different from each other in the number of incisions, flap design, and technique.

Edel was first to describe the **TRAP DOOR TECHNIQUE** to harvest a SECTG from the palate.

Langer and Langer developed the **PARALLEL INCISION METHOD**.

This technique was modified by Harris, who introduced a **SCALPEL WITH TWO BLADES** mounted 1.5 mm apart.

Raetzke used **TWO CRESCENT SHAPED HORIZONTAL INCISIONS** that converged in depth to harvest SECTG from the palate.

Bruno advocated another technique, in which **TWO HORIZONTAL INCISIONS** were used to harvest SECTG.

Hurzeler suggested a **SINGLE INCISION TECHNIQUE** to harvest SECTG, with advantages of healing, with primary intention at the donor site and very less postoperative morbidity to the patient.

**Case Report**

A 32-year male patient presented with chief complaint of receding gums in lower front teeth region since 2 months.

No significant past medical history.

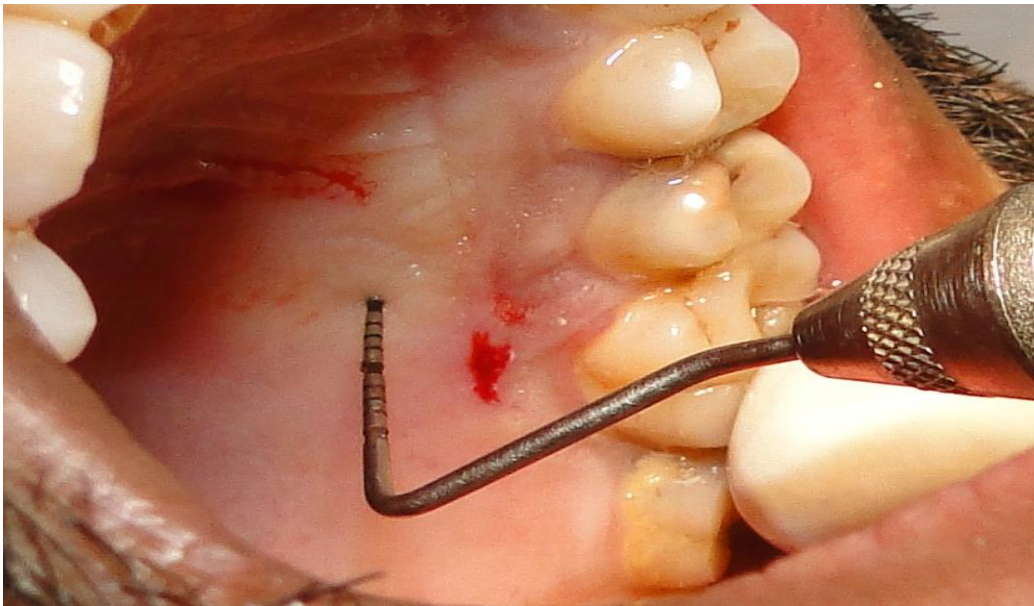
Non-Smoker.



**MILLER'S CLASS I**

**OR**

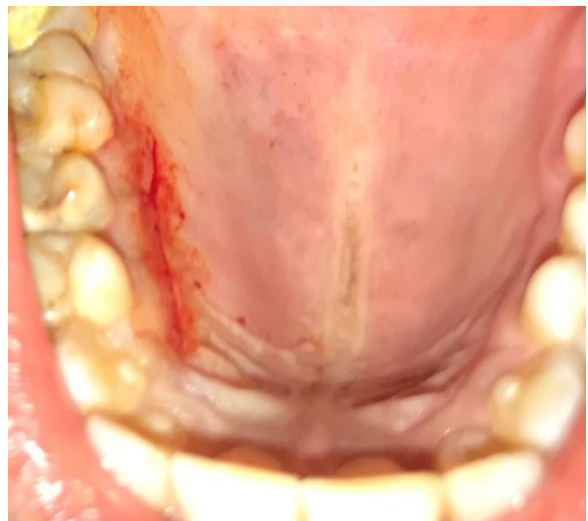
**RECESSION TYPE I (Cairo et al)**

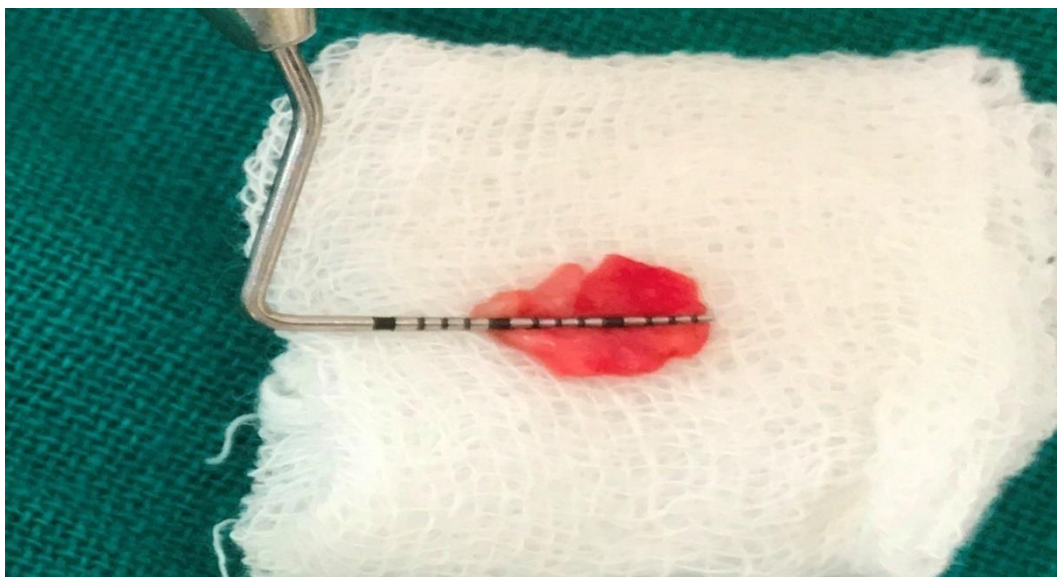
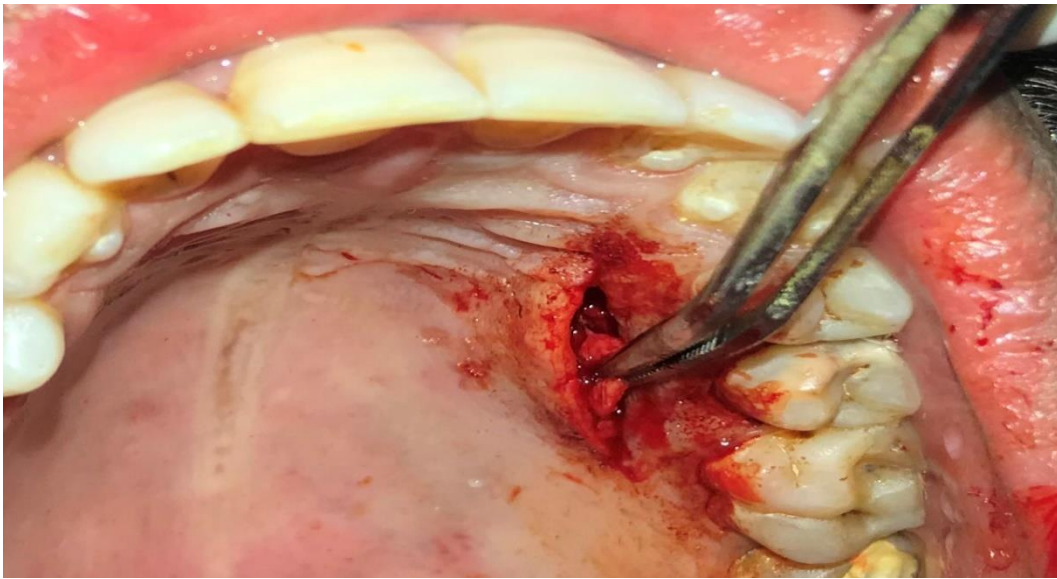


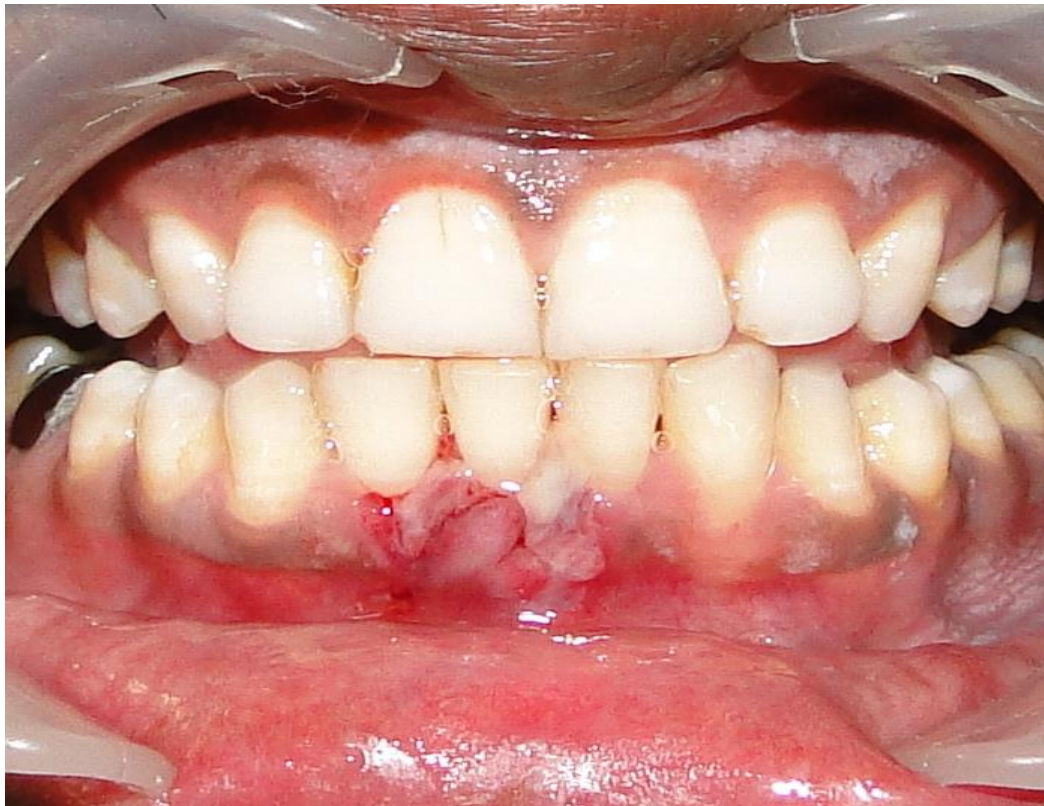
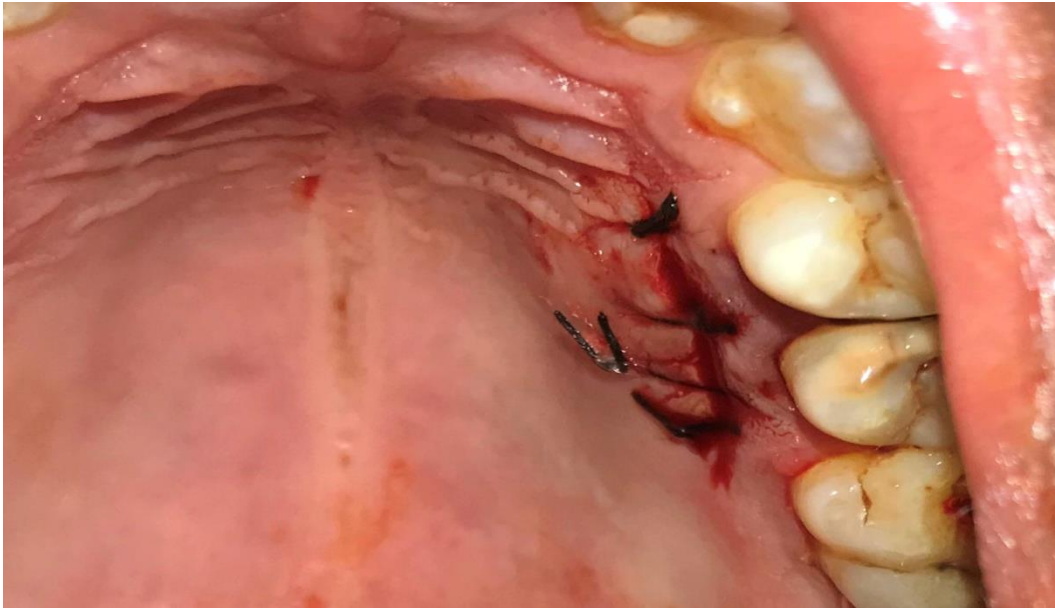
**Trans MucosaL PROBING 5MM**

**Pre-surgical phase**

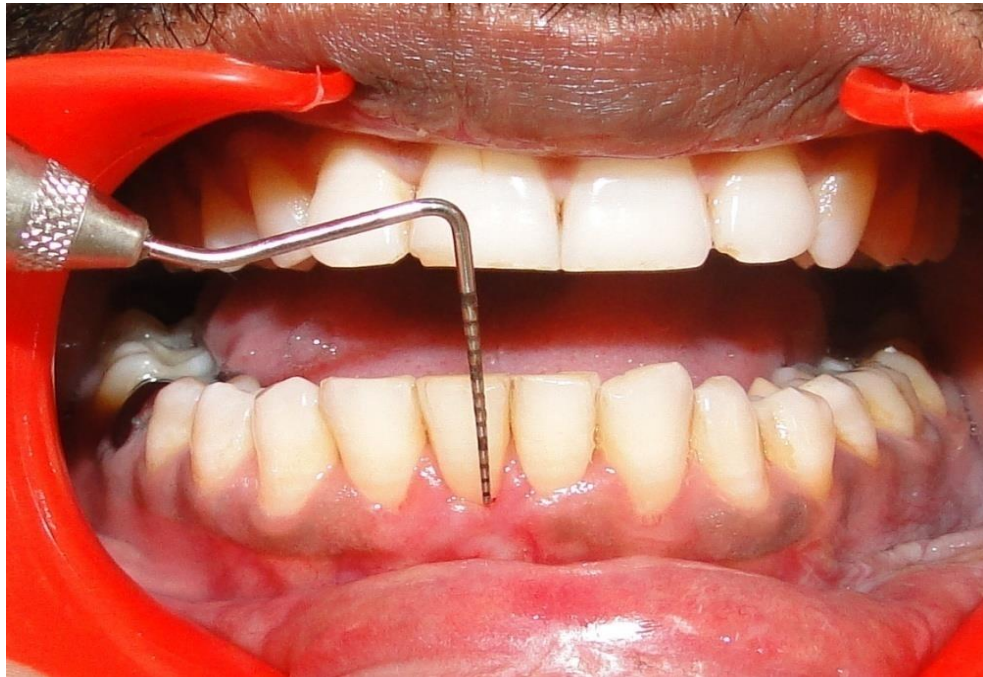
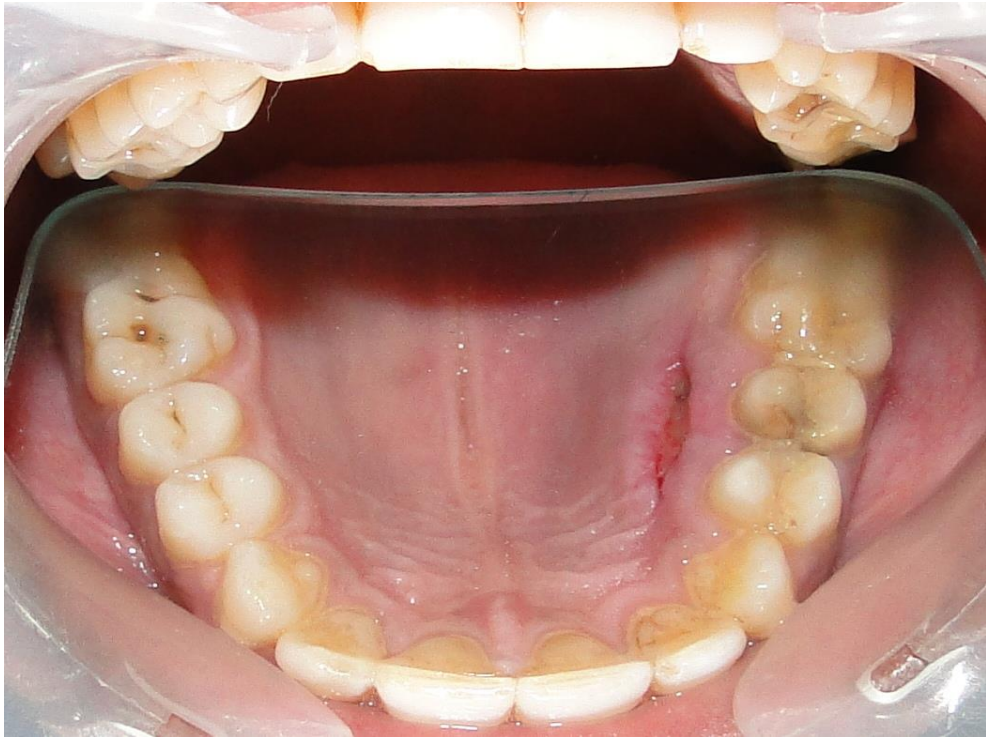
The complete treatment plan was explained to the patient, and duly written consent was obtained. COMPLETE oral prophylaxis and routine blood investigations were done.







**AFTER 5 DAYS**



**AFTER 1 MONTH**



**RESULT**



### **Discussion:**

The success of surgical procedures for root coverage depends on several factors, such as elimination and/or control of the etiology of gingival recession, evaluations of the interproximal bone level and choice for the most appropriate surgical technique, which are inherent to each clinical situation and region to be treated.

The obtained clinical outcomes are not surprising having in view that CAF with CG may be still considered the gold standard procedure for covering Miller Class I and II gingival recessions . One of the advantages of CG with a CAF over others procedures is that it produces a larger increase in the keratinized tissue compared with repositioned flaps alone

Subepithelial conjunctive tissue graft for root coverage in the treatment of recessions at single or multiple areas, attributing the procedure success to the double blood supply for the graft's nutrition, originating from the connective tissue of both the periosteum and flap.

The most important factor determining treatment modality is the presence of appropriate (height and width) gingival papilla, which guarantees good vascular supply of the graft and creates the possibility of its proper placement to the cemento-enamel junction.

The single incision technique was advocated in this case to reduce the trauma and pain experienced by patient at the donor site.

### **Conclusion**

The success of this clinical case may be attributed to the precise indication of the technique of subepithelial conjunctive tissue graft due to the high predictability of root coverage in Miller's class I and II and the double blood supply for the graft's nutrition.

Single incision technique offers the advantage of less bleeding, better visibility, and early determination of the size of the graft to be harvested. It also retains the advantages offered by the original single incision technique of being less traumatic, faster healing with primary closure, and less postoperative complications.