Fondazione IRCCS Cà Granda
Ospedale Maggiore Policlinico
Dental and Stomatology Clinic
of the University of Milan
Department of Parodontology

Biological Papilla Preservation Technique, Tunneling Approach for periodontal regeneration surgery: case series

Batia S., Pieriboni S., Pederzani M., Mascellaro A., Fimmanò M., Limiroli E., Gaffuri F., Citriniti J., Bellucci G.

AIM

The objective of the study is an alternative surgical approach to improve the safe use of free incision technique used for periodontal tissue regeneration surgery .

Preservation of a sufficient vascular supply is essential to ensure survival of the elevated flap .

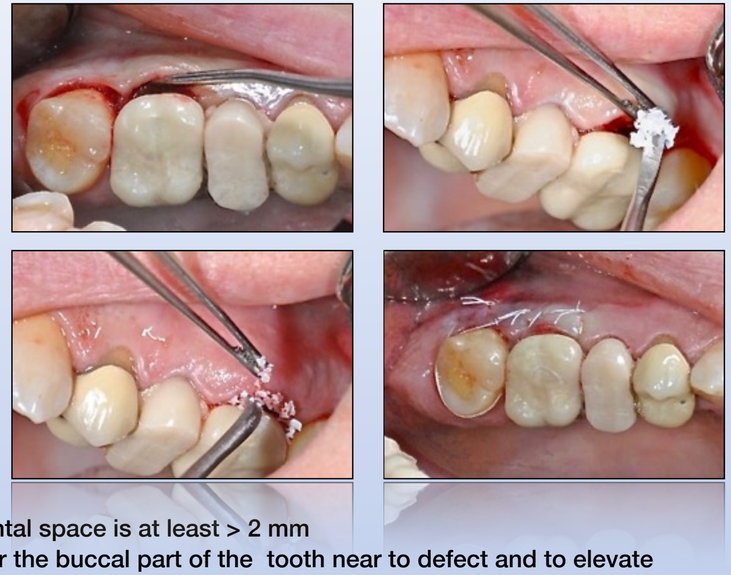
An Incision free flap and then a gently elevation flap for an improved esthetic outcome due to a minimized risk of prospective scar- tissue formation.

METHODS

Before surgery we waited at least 6 months after the Non surgical periodontal treatment

The use of magnification and micro instrument , mini micro blades, PTFE 6/0 sutures,, mini five curettes,Tunneling surgery instrument ,micro alveolar spoon .

Also is very important to know the biotype of the gingiva, we can use this technique with medium or thick gingiva ,that we evaluated using Colorvue Probe.



The width of the inter-dental space is at least > 2 mm

The incision all around for the buccal part of the tooth near to defect and to elevate a

gently full thickness flap with initial 4 mm and a spilt thickness flap at least 3mm until to have a

passive flap without tension close to the intrabony defect. After elimination of inflammatory tissue

and cleaning the defect, we can use biomaterial for periodontal regeneration.

Enamel matrix protein and bone chips were used in this case report .

A collagen membrane also we can be used in case of furcation of 1°defect .

The suturing phase is developed with a cross suspended suture to stabilize the surgery site with thick gingiva biotype, while in case of medium biotype it's better a double cross link suspended suture. In case of furcation we can use two concentric suspended sutures with peripheral different distance.

RESULTS

Effect of tissue regeneration surgery with free papillary incision technique shows a preservation of blood vessels for a better healing and an immediately post

surgery comfort for the patient. After fifteen days we noted a better healing of tissues in the area of the surgery.

CONCLUSIONS

This technique with free papilla incision papilla is a method to improve healing for periodontal regeneration preserving as possible the blood supply and improving esthetic outcome achievement of wound primary closure.

	BIOLOGICAL PAPILLA PRESERVATION TECHNIQUE
INDICATIONS	Regeneration therapy of 1° furcation and 2/3 walls intrabony defects; rx angle < 20
INCLUSION CRITERIA	At least 90 days after Non Surgical Periodontal Treatment ; < 20%plaque and bleeding score; width of the inter-dental space is > 2 mm; better with thick and medium biotype
MATERIALS	Colorvue ® Biotype Probe, Hu friedy (by Rasperini & Testori); magnification; Tunneling instruments for surgery (Stoma ® by Dr A. Sculean); matrix derivate mixed with bone chips ,(scaffold and growth factor); collagen membrane for 1° furcation
BEFORE SURGERY	Periodontal probing and bone sounding
SUTURES	Cross suspended suture in thick biotype; double cross suspended suture in medium biotype
POST SURGERY	Rx control after 0-3-6-12 months T0-T1-T2; rx check with customized rx byte; no probing until 1 year

References

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