POST-GRAFT PAIN MANAGEMENT

Evaluating Collagen Sponge and Composite in Free Gingival Graft Donor Sites

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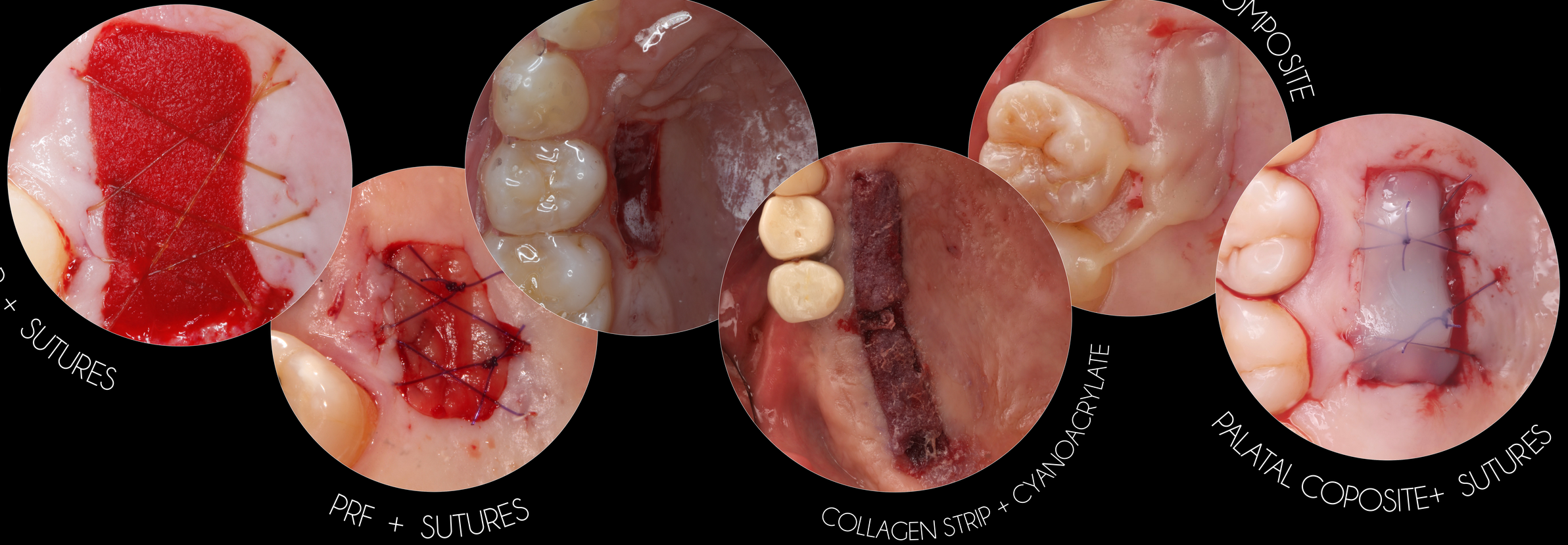


INTRODUCTION

SOFT TISSUE GRAFTING

PATIENTS OFTEN FACE SIGNIFICANT POSTOPERATIVE PAIN, DISCOMFORT, AND BLEEDING FROM THE DONOR SITE

HEALING BY SECONDARY INTENTION

INCREASED PAIN AND MORBIDITY

COLLAGEN SPONGES WITH FLOWABLE RESIN COMPOSITE CAN ALLOW COMPLETE TISSUE EPITHELIZATION

COMPOSITE RESIN

AVAILABLE, EASY TO USE AND TISSUE FRIENDLY

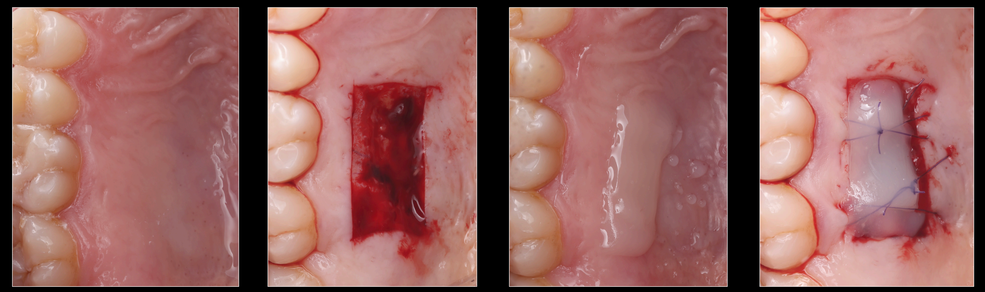
APPLIED WITHOUT INFLAMMATION, REDUCE PROLONGED BLEEDING, AND DIMINISH PAIN WHEN IN CONTACT WITH GINGIVAL TISSUE

HEMOSTATIC PROPERTIES OF COLLAGEN SPONGE + SEALING AND PROTECTION OF FLOWABLE COMPOSITE RESIN

MATERIAL AND METHODS

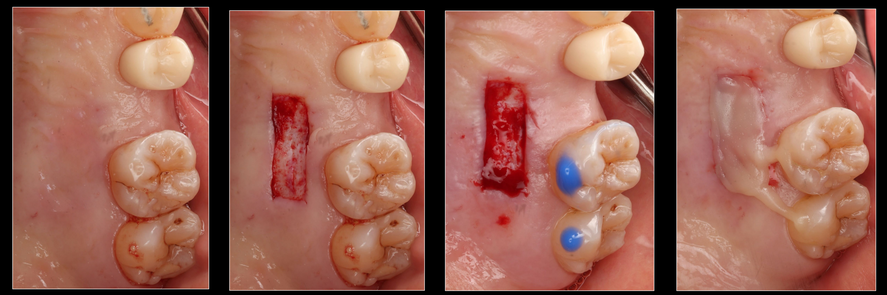
PALATAL WOUND IS PROTECTED BY PLACING A HEMOSTATIC COLLAGEN SPONGE

STABILIZATION TYPE 1 / SUTURES



- Resin composite along the edges of the collagen sponge
- Composite stabilized using criss-cross sutures

STABILIZATION TYPE 2 / ETCHED TEETH

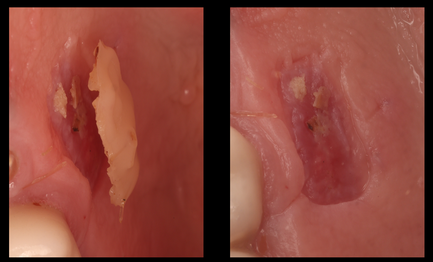


- 35% phosphoric acid gel applied for 30 seconds on the palatal surfaces of the teeth - rinsed for 10 seconds - excess moisture blotted
- Adhesive for 15 seconds, followed by flowable resin composite
- Resin composite placed along the edges of the collagen sponge

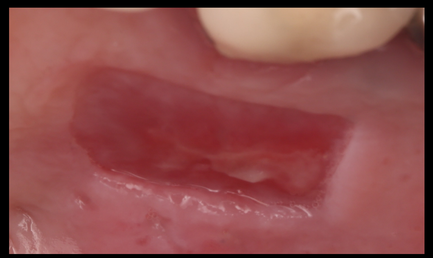
RESULTS

FOLLOW UP / 2 WEEKS

STABILIZATION TYPE 1 / SUTURES



STABILIZATION TYPE 2 / ETCHED TEETH



INTACT FOR TWO WEEKS POST-SURGERY

COLLAGEN SPONGES

- POPULAR IN WOUND HEALING
- BIOCOMPATIBILITY, SAFETY, AND COST-EFFECTIVENESS.
- MECHANICAL PROTECTION
- SUPPORTIVE MATRIX FOR CLOT FORMATION
- HELPING REDUCE POSTOPERATIVE PAIN

FLOWABLE RESIN

- MAY ENHANCE THE SPONGE'S SEALING PROPERTIES
- REDUCING PALATAL PAIN MORE EFFECTIVELY THAN THE SPONGE ALONE

CONCLUSION

APPLYING A FLOWABLE RESIN COMPOSITE COATING OVER A HEMOSTATIC COLLAGEN SPONGE PLACED AFTER PALATAL HARVESTING APPEARS TO OFFER ADDITIONAL BENEFITS, INCLUDING PAIN RELIEF, AT A LOW COST COMPARED TO USING ONLY A SUTURE-STABILIZED COLLAGEN SPONGE

REFERENCES

Basma HS, Saleh MH, Abou-Arraj RV, Imbrogno M, Ravida A, Wang HL, Li P, Geurs N. Patient-reported outcomes of palatal donor site healing using four different wound dressing modalities following free epithelialized mucosal grafts: A four-arm randomized controlled clinical trial. Journal of Periodontology. 2023 Jan;94(1):88-97.

Meza-Mauricio J, Mourão ER, Oliveira Marinho K, Vergara-Buenaventura A, Mendoza-Azpur G, Muniz FW, Santamaria MP, Faveri M. Effect of collagen sponge and flowable resin composite on pain management after free gingival graft harvesting: A randomized controlled clinical trial. European journal of oral sciences. 2023 Jun;131(3):e12935.