



Soft Tissue Grafting

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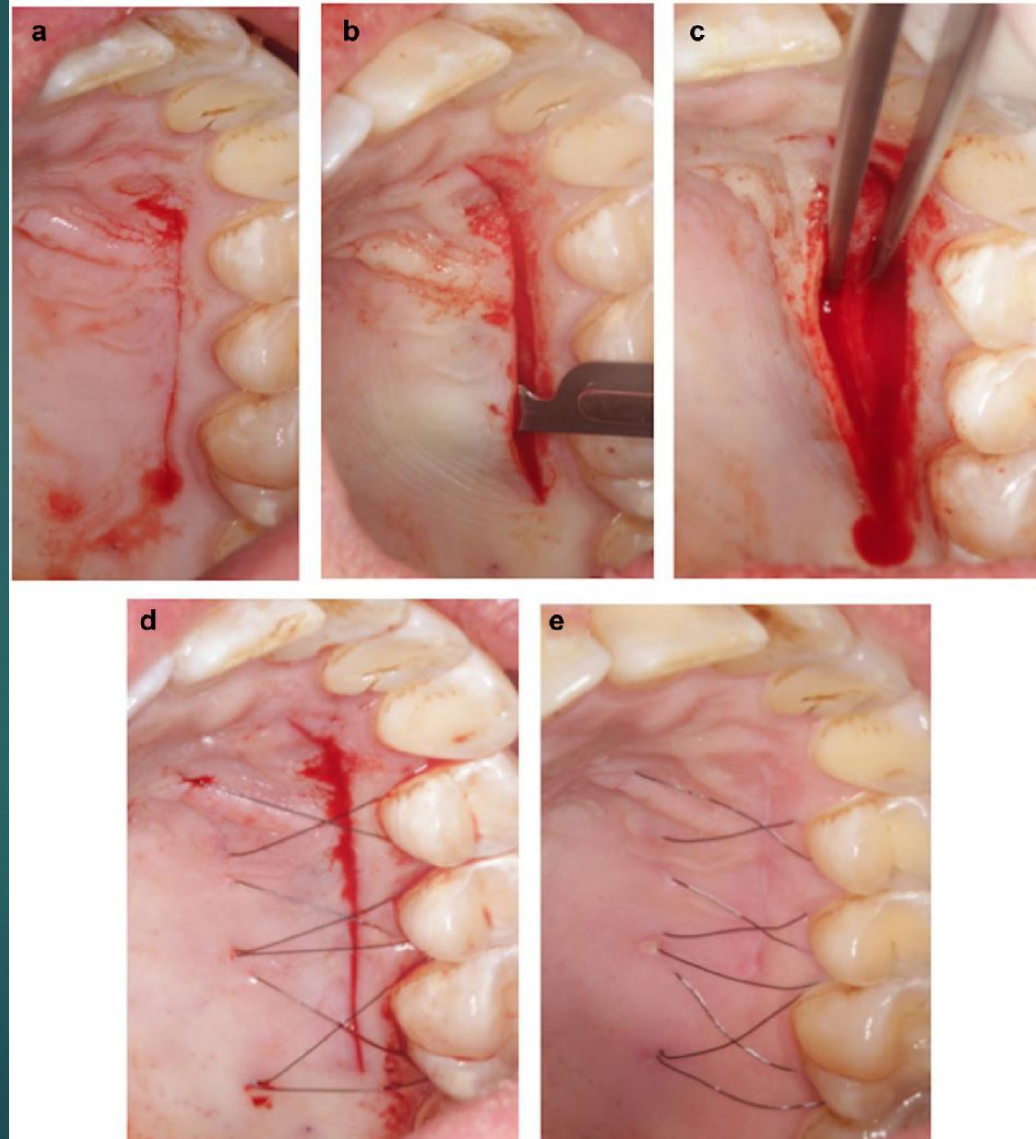
Novel Techniques for Root Coverage

- ▶ Graft Splitting
- ▶ Double Connective Tissue Graft
- ▶ Tunnel Technique/Frenuloplasty
- ▶ Multiple Pedicle/Coronally advanced flap
- ▶ V-Reverse Suturing Technique

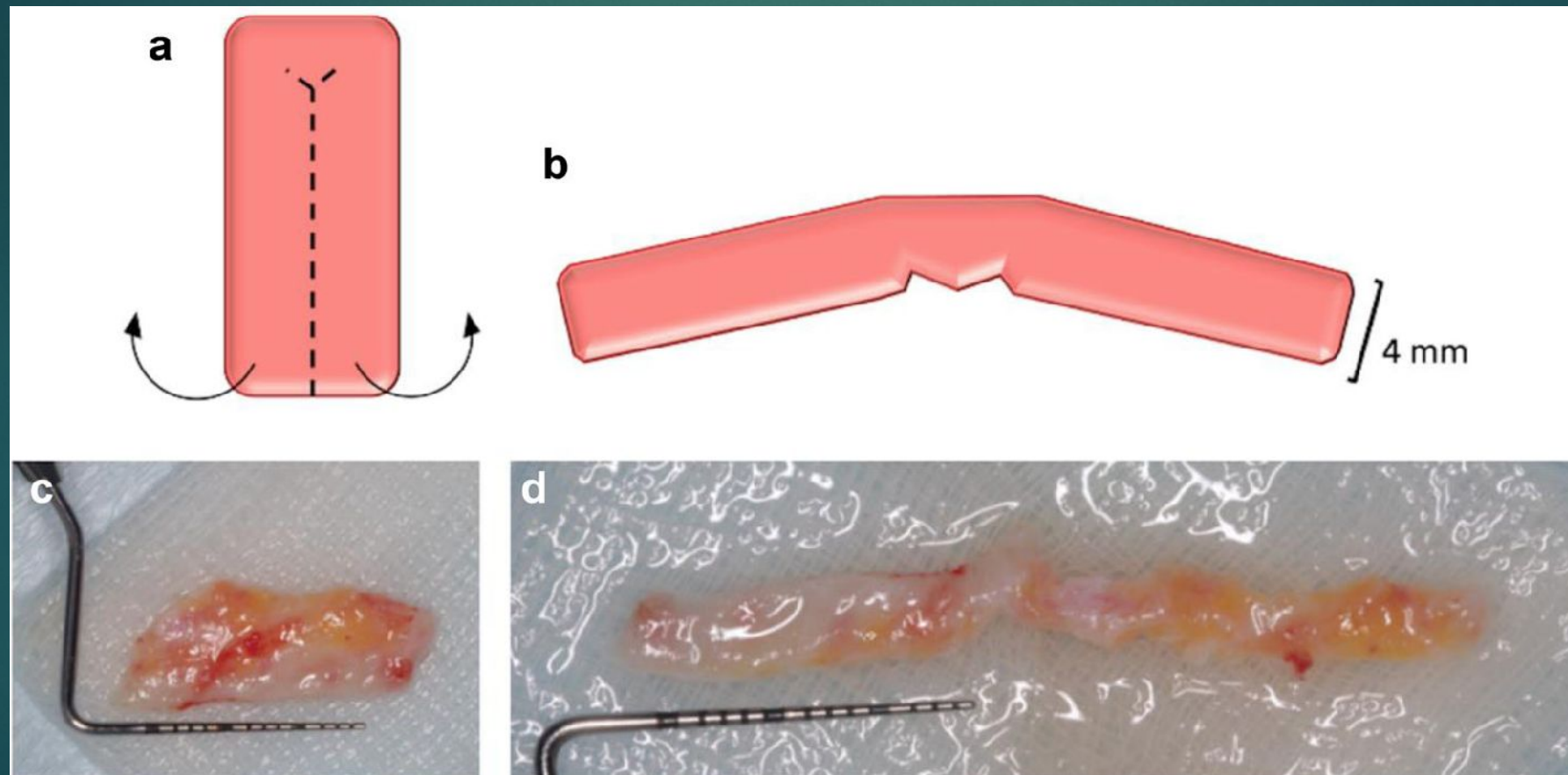
Graft Splitting for Multiple Defects

- ▶ Martin-Cabezas (Sept 2021, Clin Adv in Perio)
- ▶ Minimum 4mm of graft height needed for predictable root coverage
- ▶ Split graft technique reduce number of surgeries needed as well as decreases need for harvesting tissue from both sides of palate
- ▶ Minimum graft height needs to be 8mm in order to split the graft

Technique



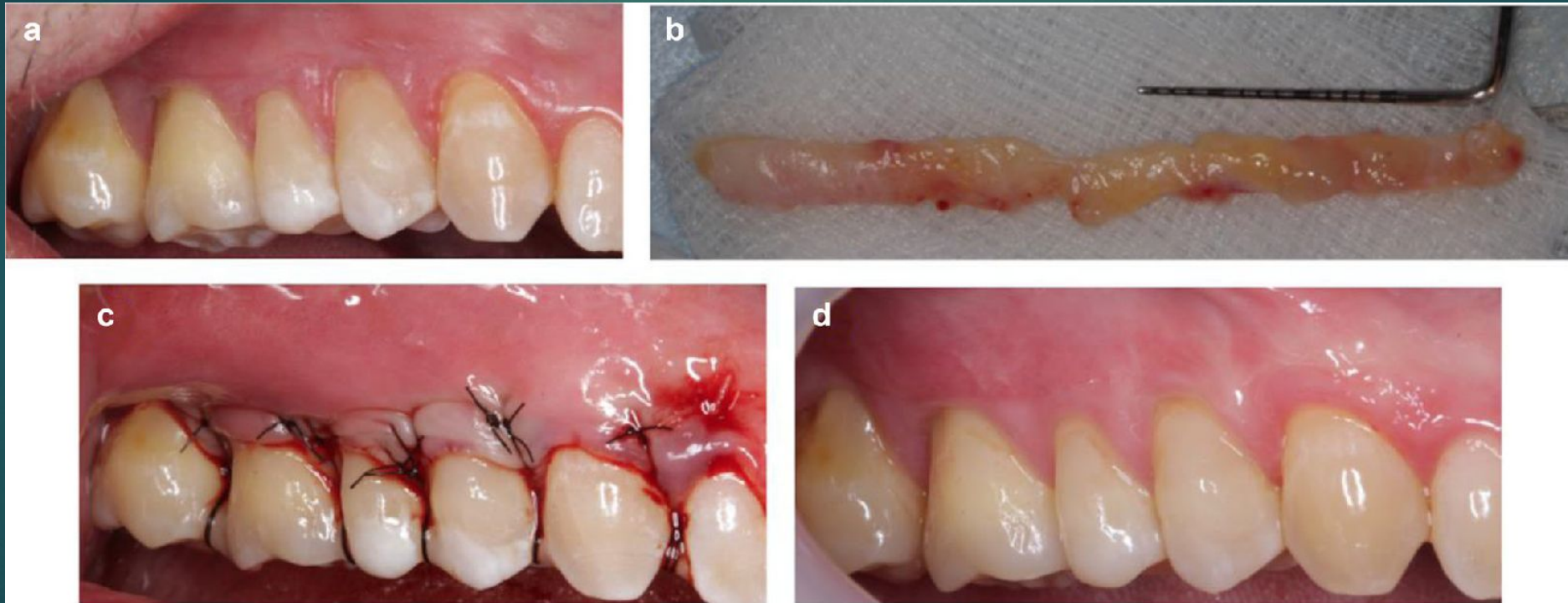
Graft Split



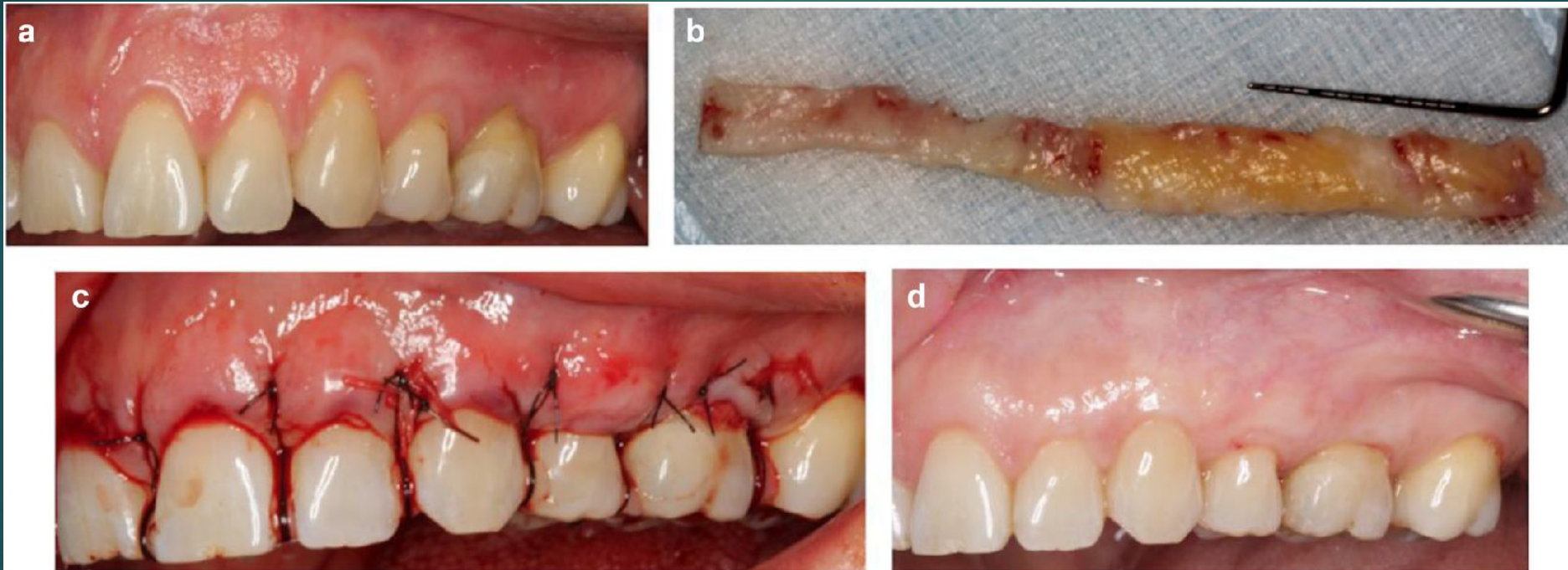
Surgery and 6 month Follow-up (58mm long graft)



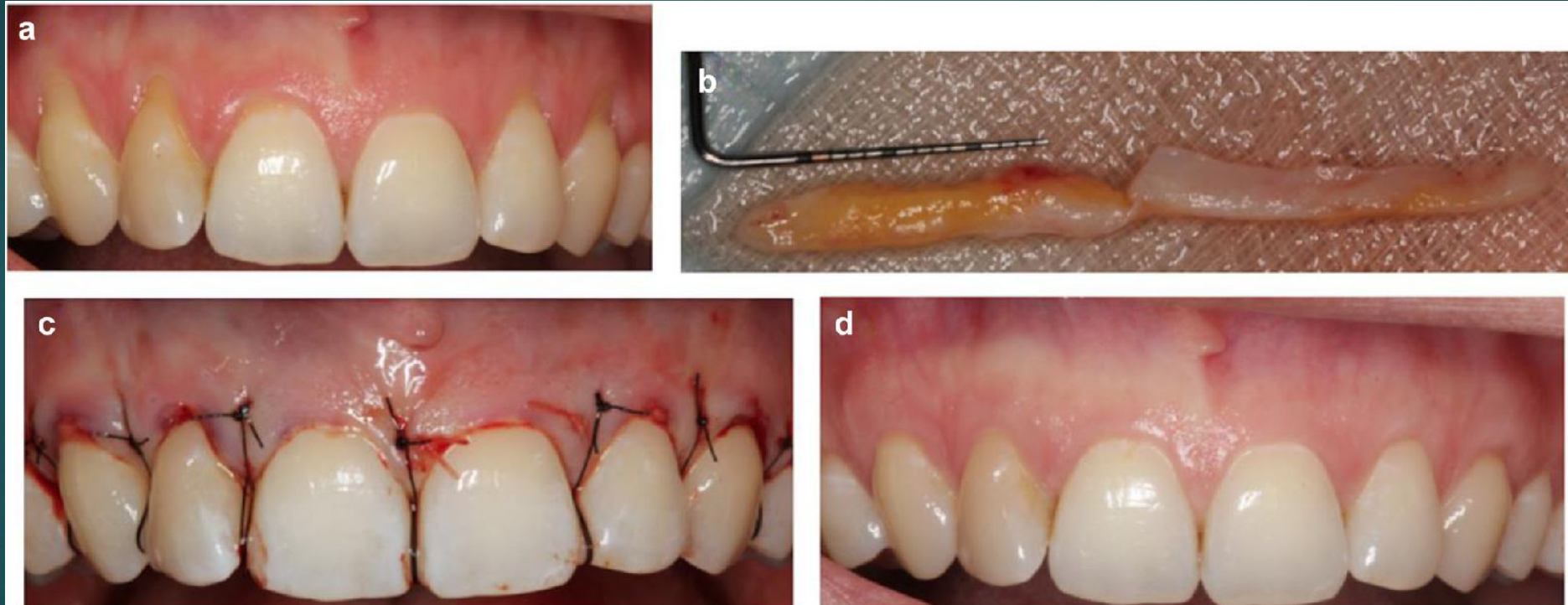
Split Graft Surgery with 6 month follow-up (45mm graft length)



Split Graft Surgery with 6 month follow-up (57mm length graft)



Split Graft with 6 month Follow-up (47mm length graft)



Double Connective Tissue Graft

- ▶ Franceschi Sept 2021 (Clin Adv in Perio)
- ▶ Main indication is for deep Coronal/Radicular defects (Loss of CEJ)

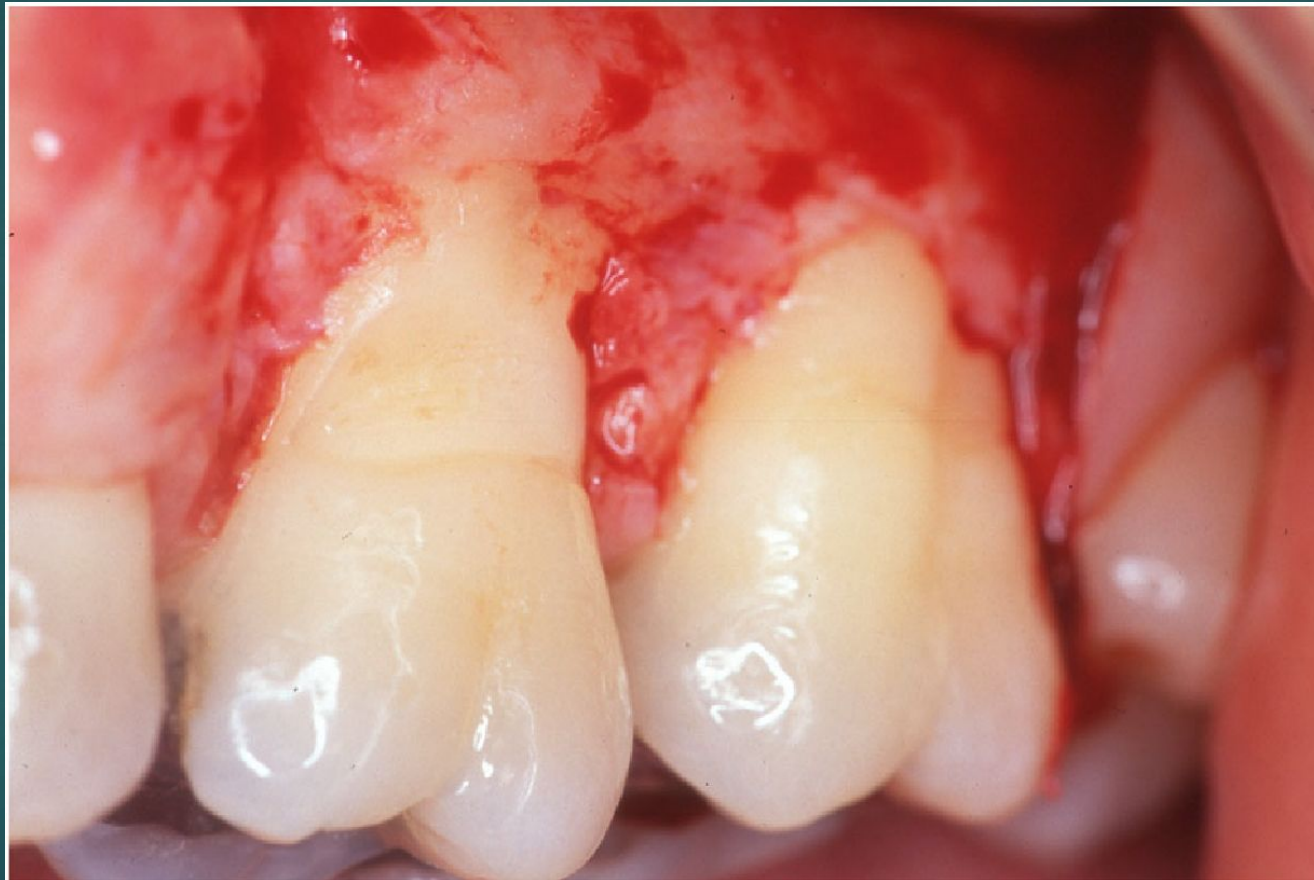
Surgical Case (Non-carious with loss of CEJ)



Defect depth >1 mm



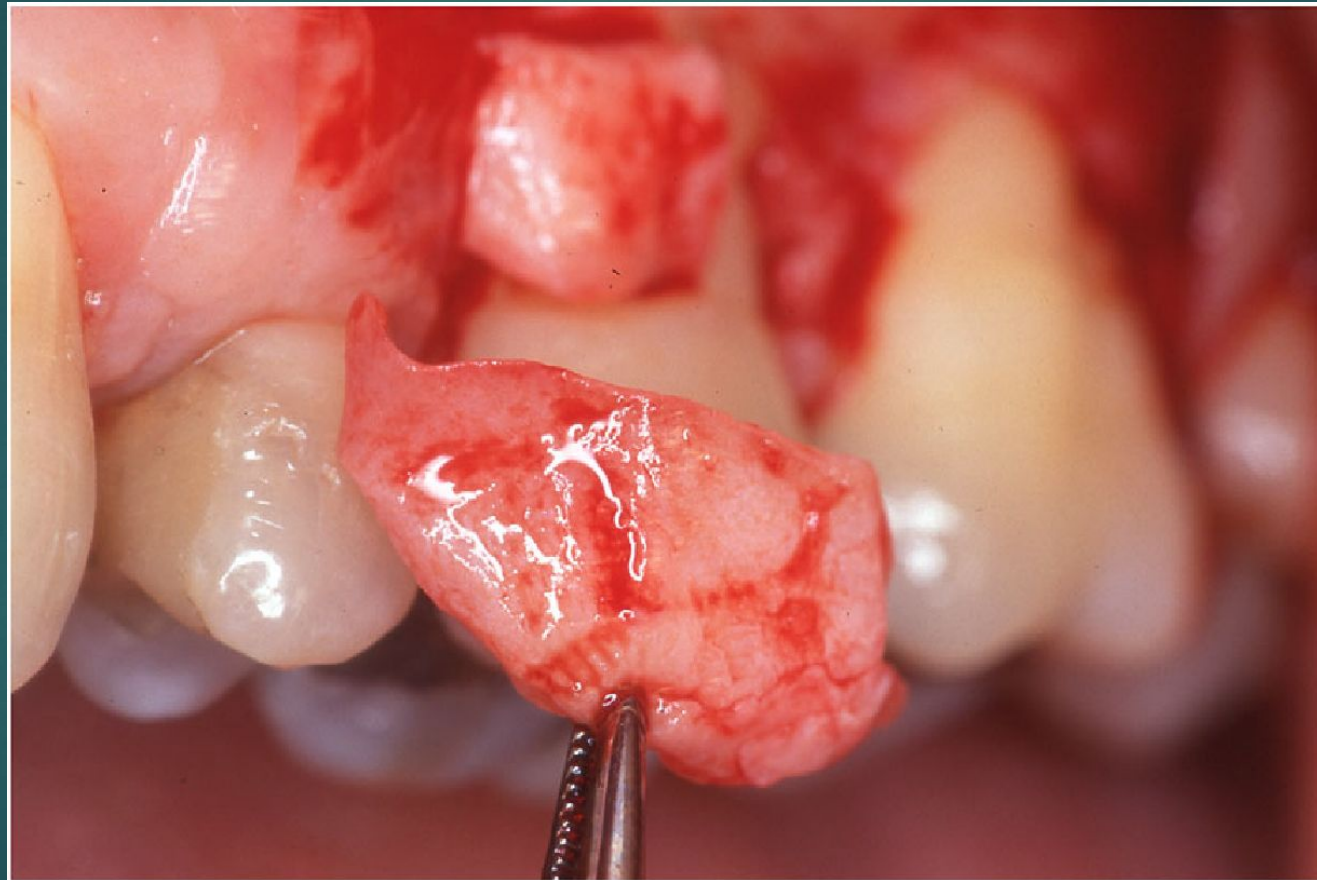
Root surfaces polished only,
papillae de-epithelialized, split
thickness flap apical to MGJ



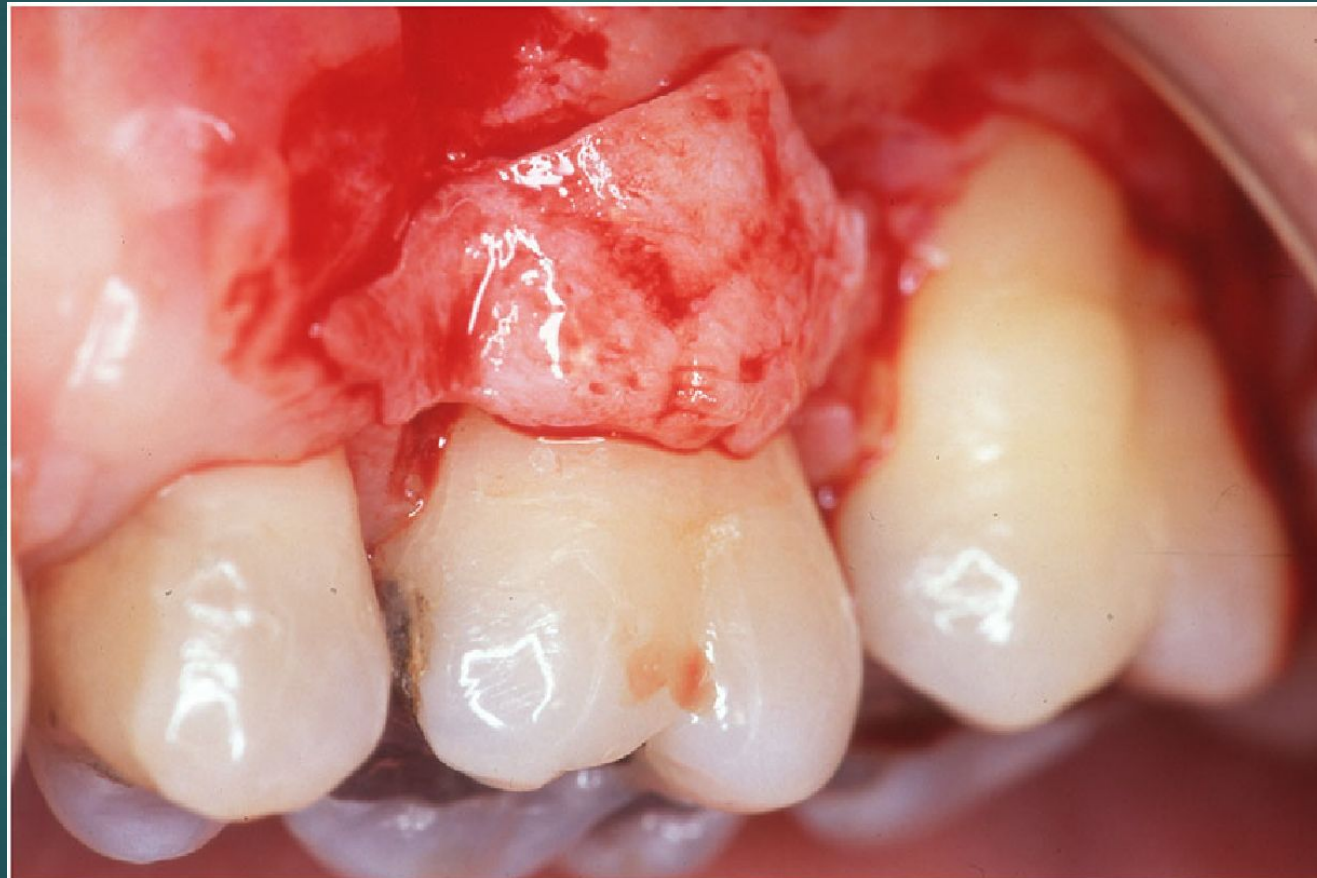
First Graft adapted to abrasion defect without sutures



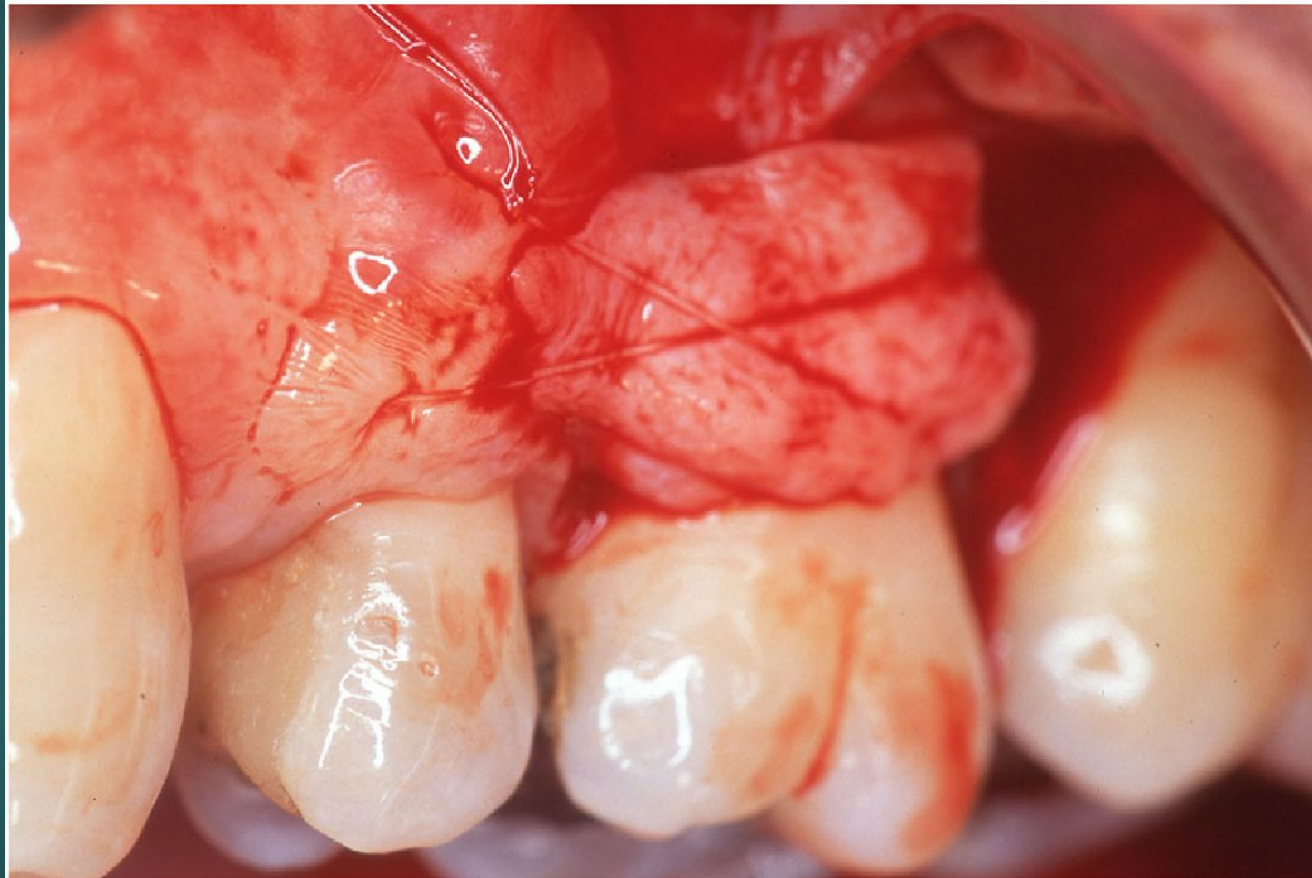
Second graft (larger than first graft)



Second Graft positioned over first graft/defect/CEJ



Outer graft stabilized to papillae and mesial and distal tissue with resorbable sutures



Flap advancement (Tension free)



1 year recall



19 year recall



Tunnel Technique/Frenuloplasty

- ▶ Rimbart 2021 (Clin Adv Perio)
- ▶ Treatment for isolated mandibular anterior recession defect with shallow vestibule and aberrant frenal attachments

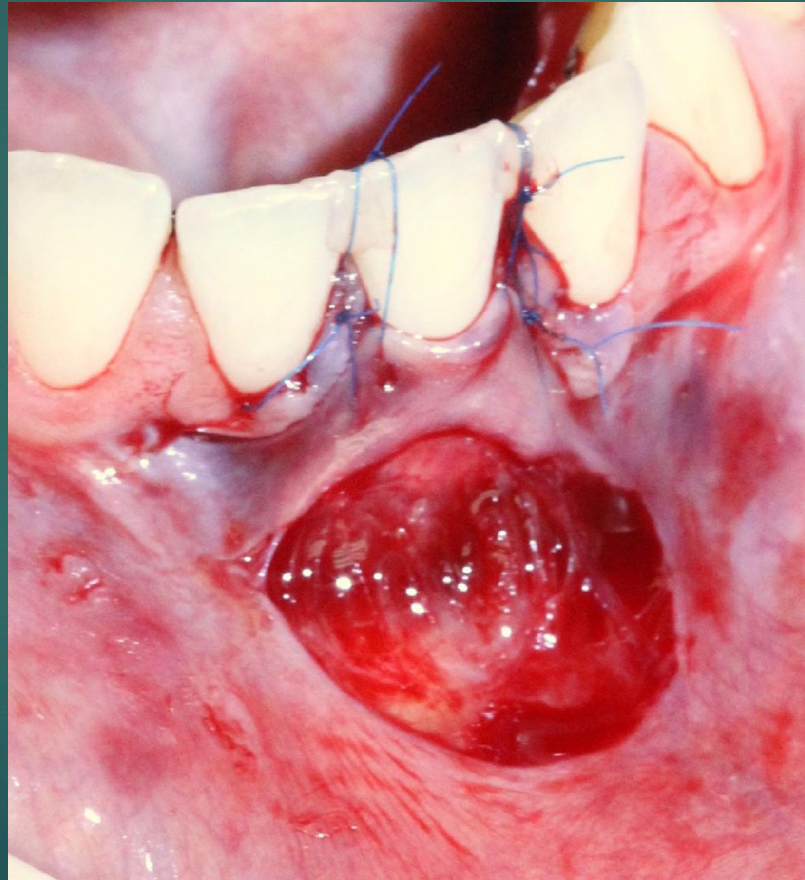
Initial Presentation



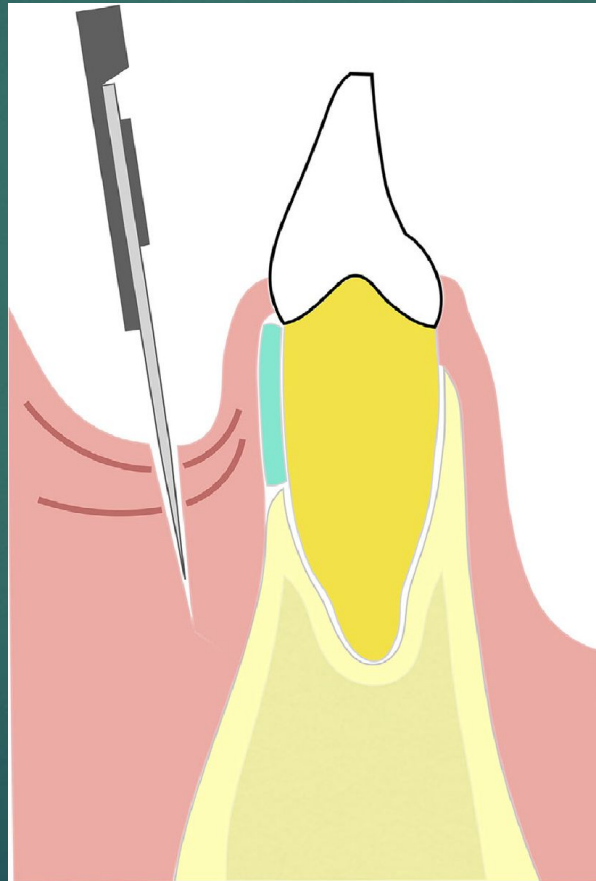
Tunnel Preparation (Extends 3-4mm beyond extent of recession defect)



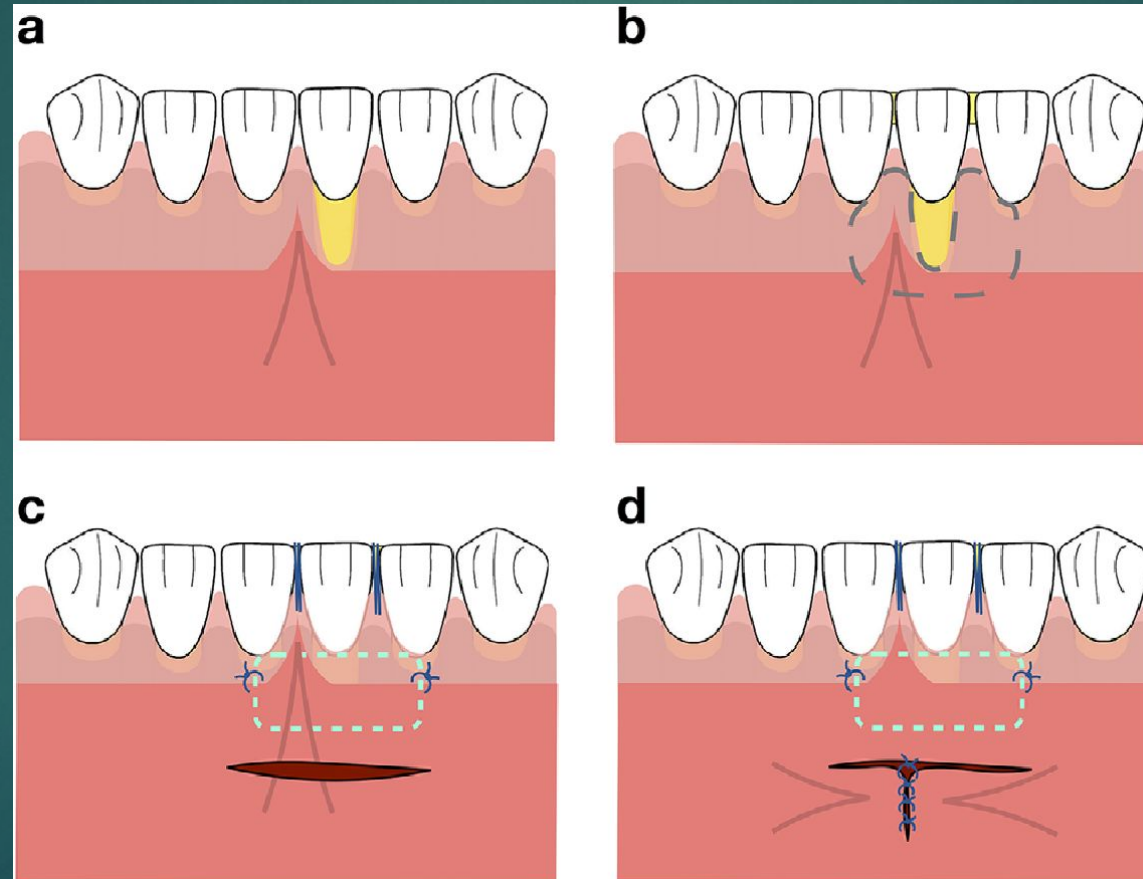
Graft placed in tunnel with subsequent frenuloplasty



Vestibuloplasty



Technique Diagram



Pre/Postop/1 year/5 year recall



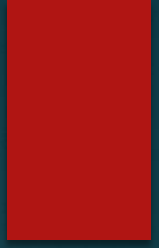
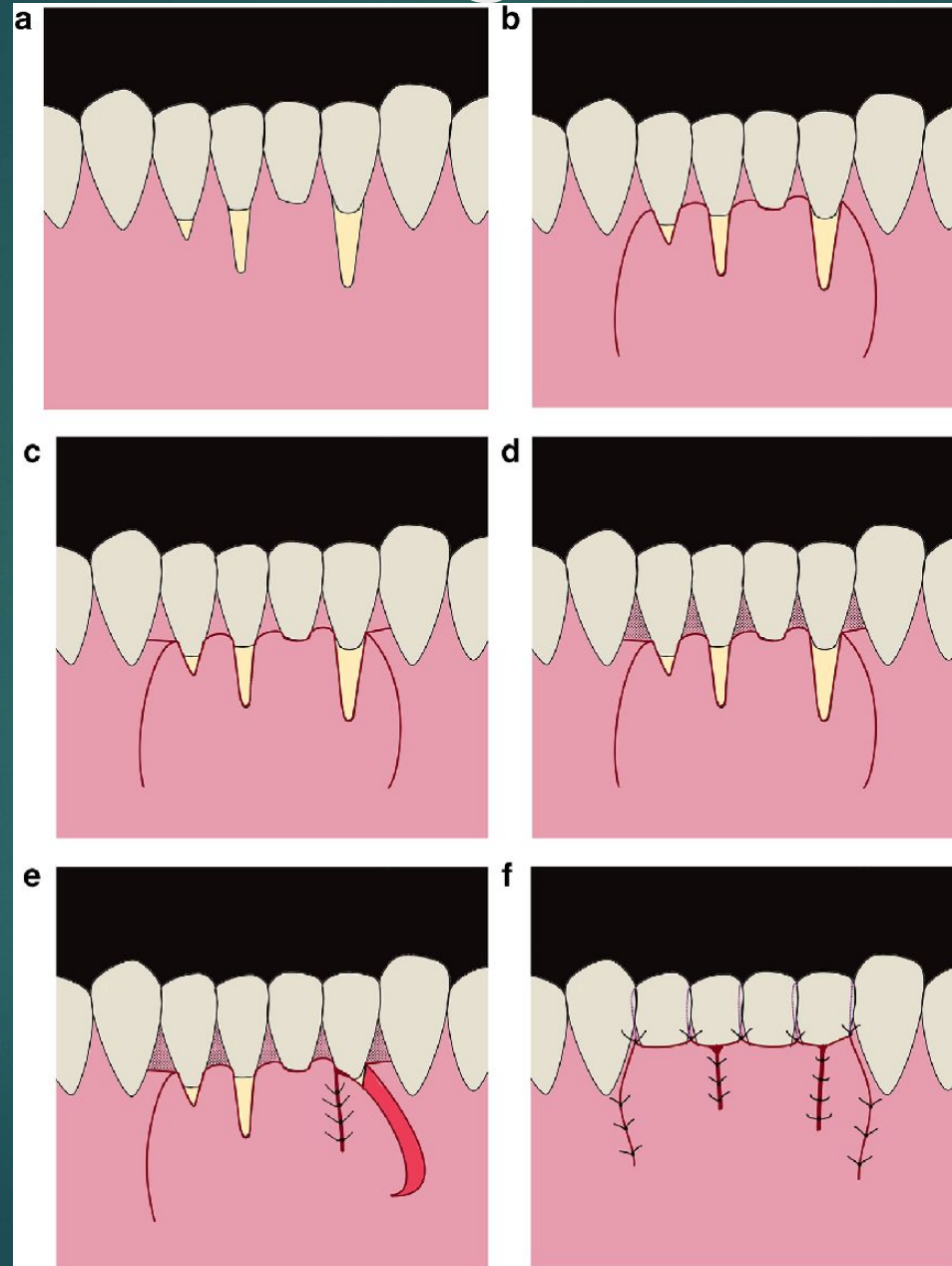
Factors for Success

- ▶ Lateral tunnel must exceed width of recession defect
- ▶ Detachment of papillae on lingual side
- ▶ CTG must be higher and 3X wider than recession defect
- ▶ Frenuloplasty must maintain integrity of CTG

Multiple Pedicle/Coronally Advanced Flap

- ▶ Tunkel 2021 (Clinical Adv Perio)
- ▶ Treatment of multiple/deep Miller Class II Recession Defects

Diagram



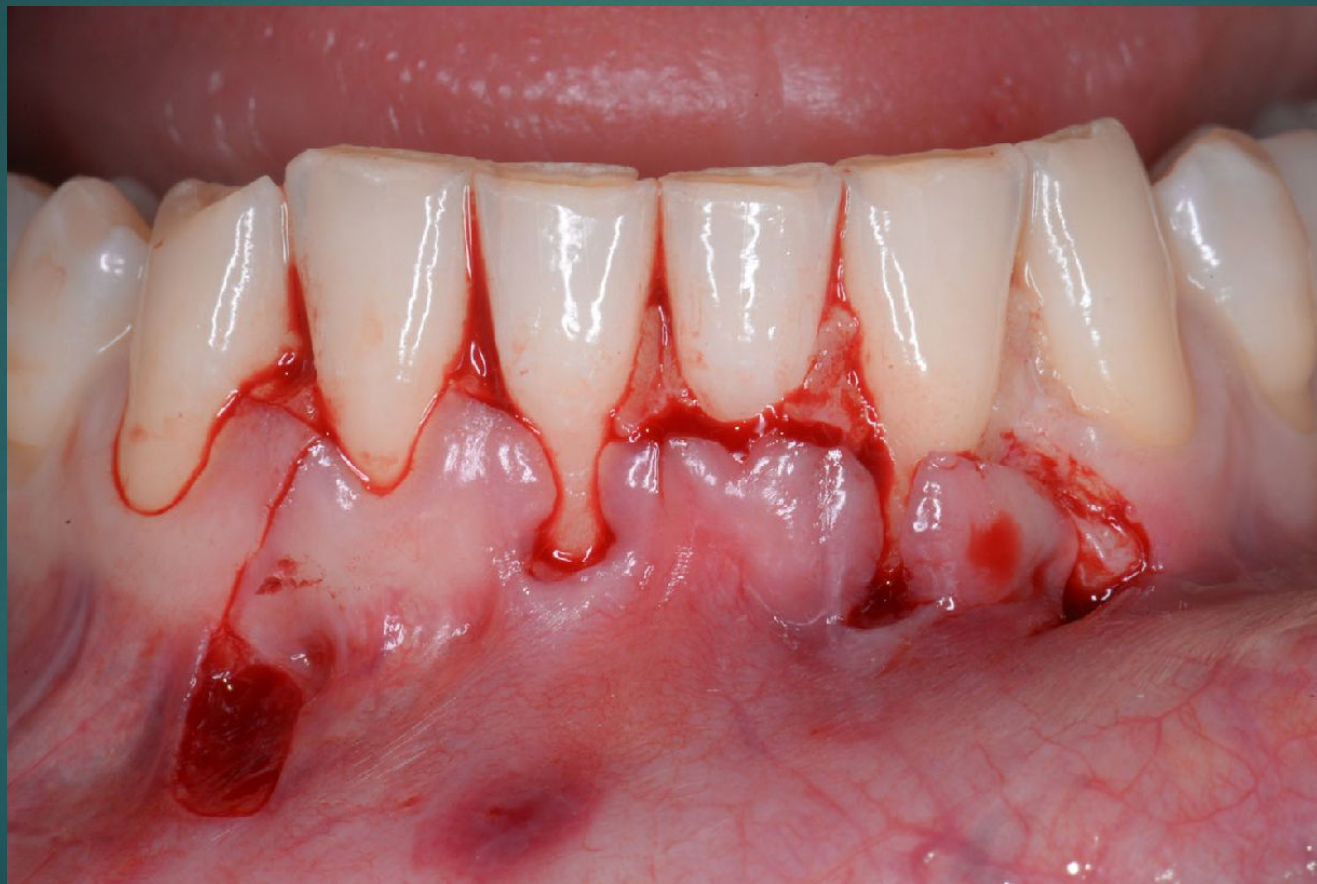
Preop



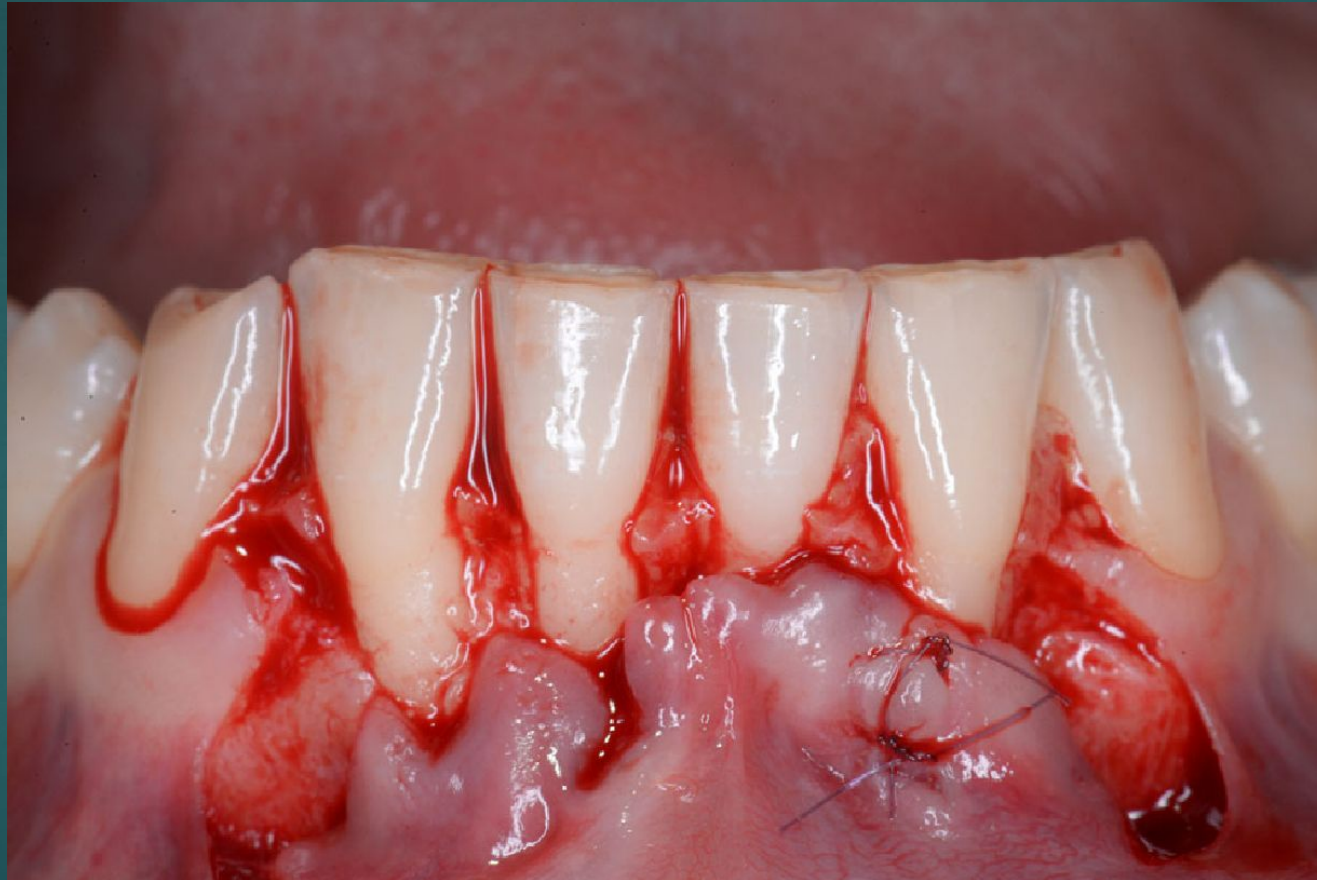
Initial curved incisions



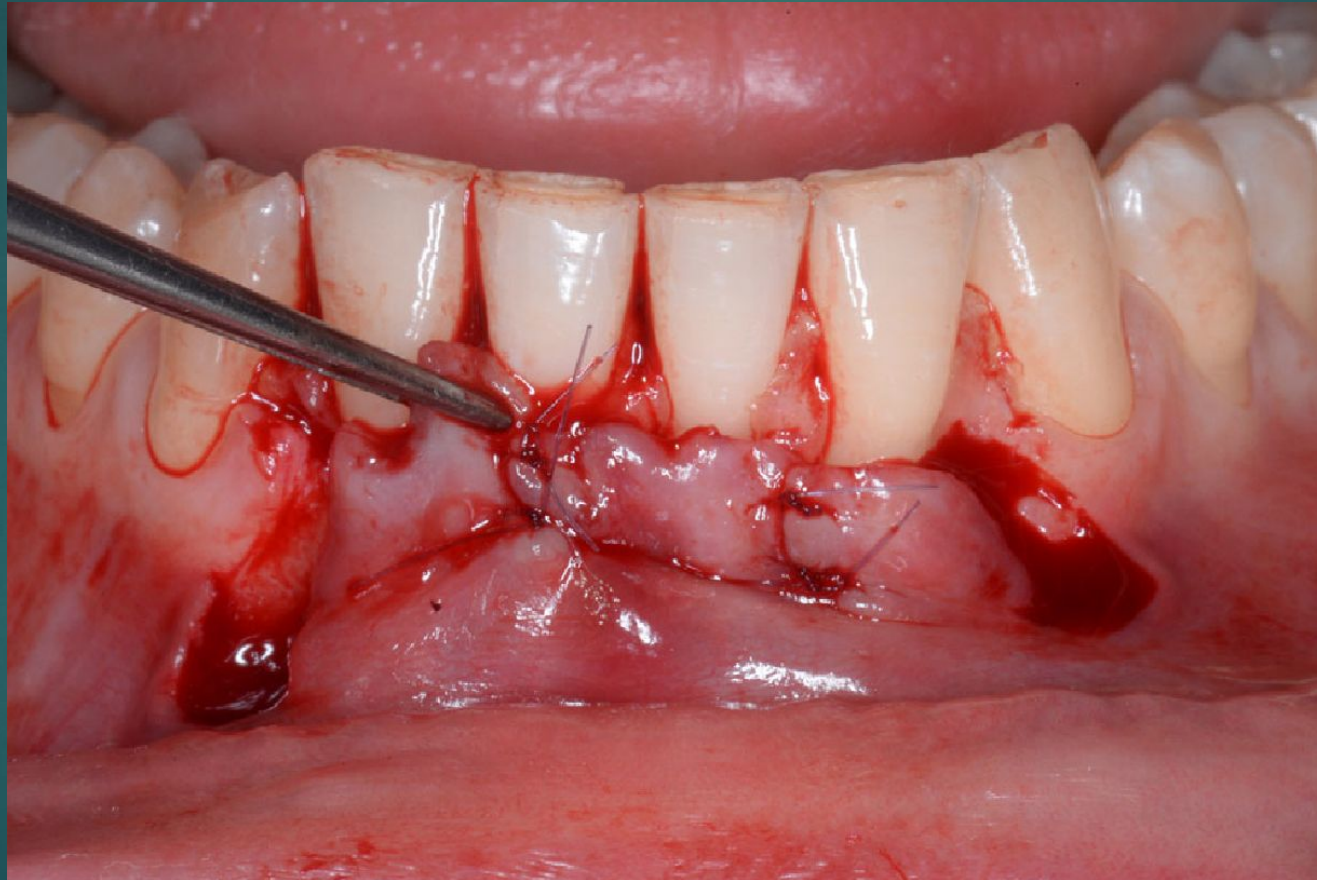
Full/partial thickness flap



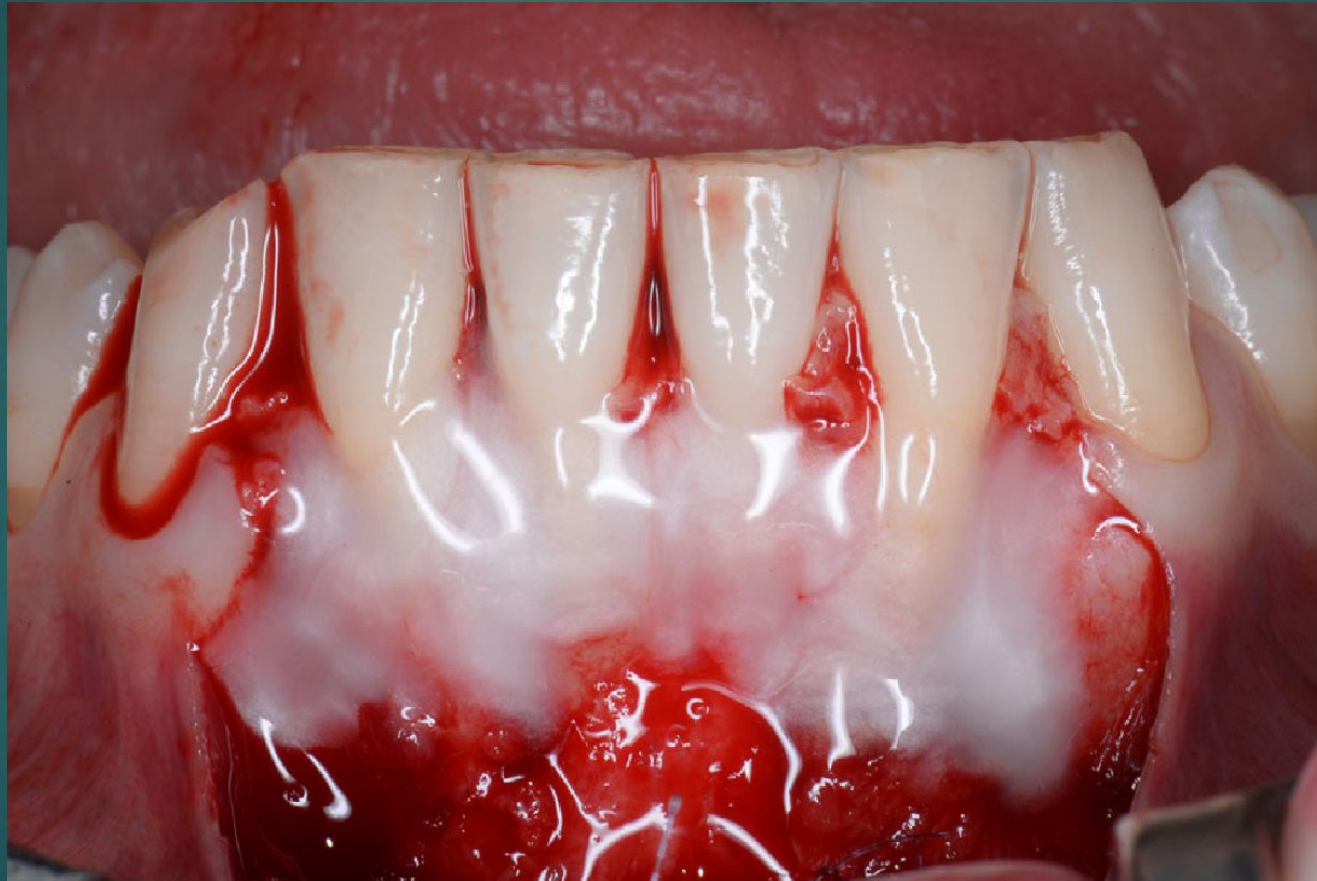
Suturing of pedicles with flap elevation



Flap elevated with tension free advancement



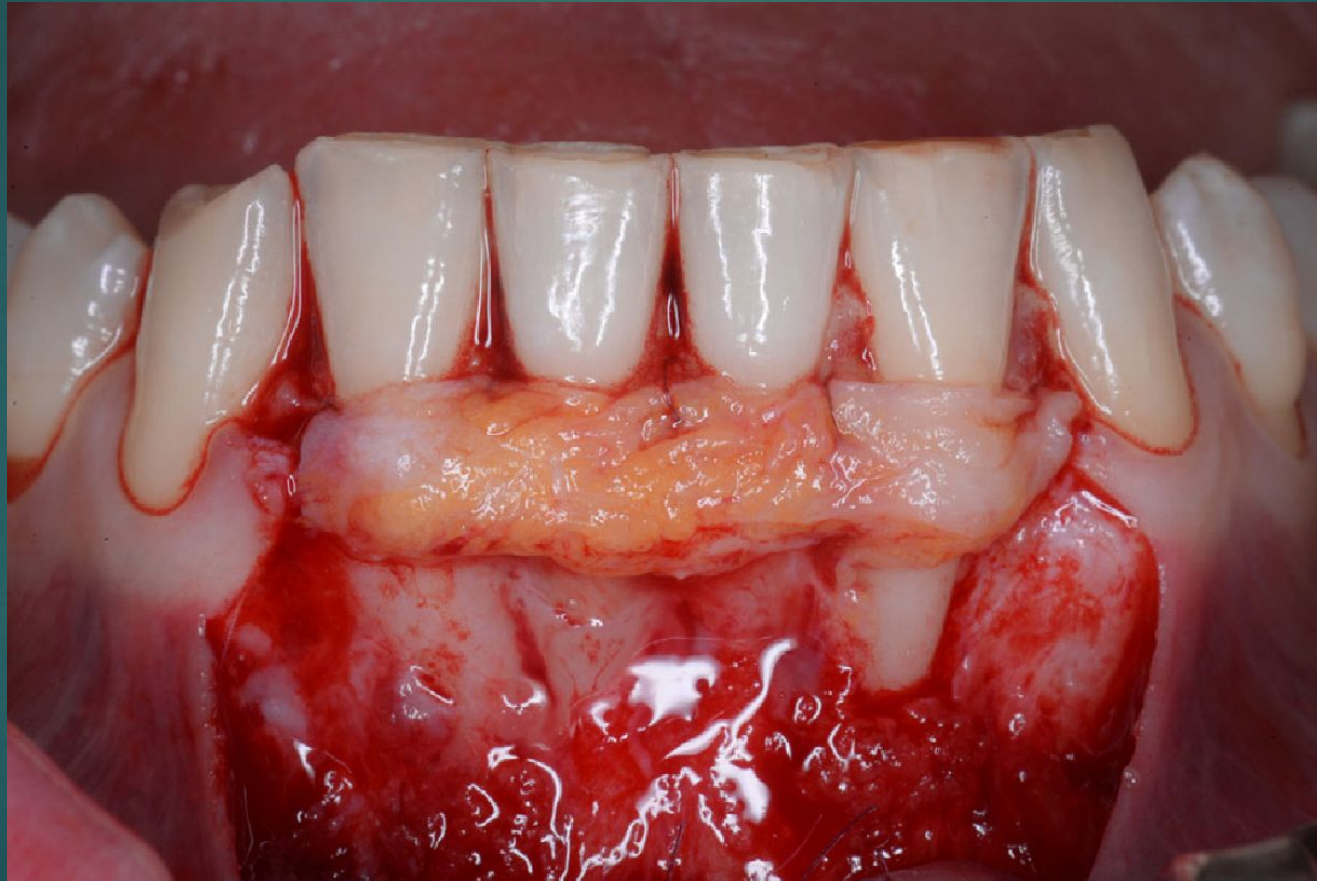
EDTA Root conditioning



Emdogain application



CTG placed



Flap stabilized



2 week PO



8 weeks PO



2 years PO



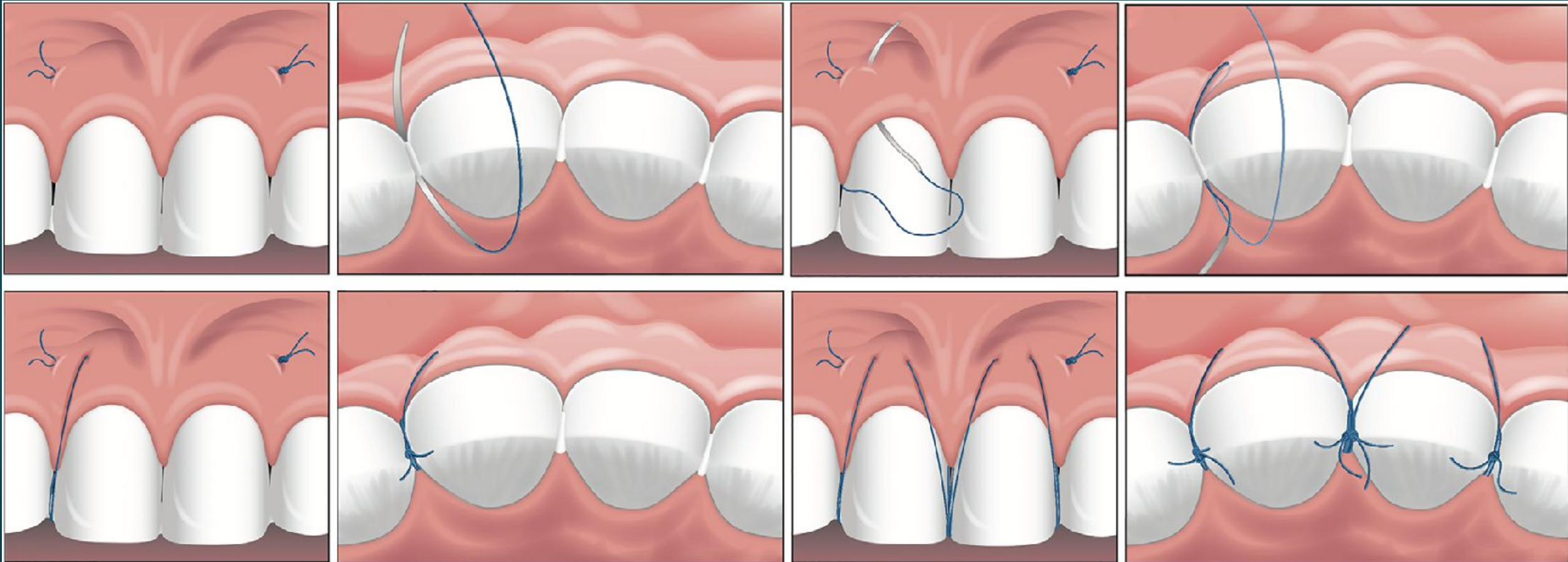
Factors for Success

- ▶ Meticulous handling/control/suturing of pedicles needed for success
- ▶ Tension free advancement of flap at least 2mm coronal to CEJ

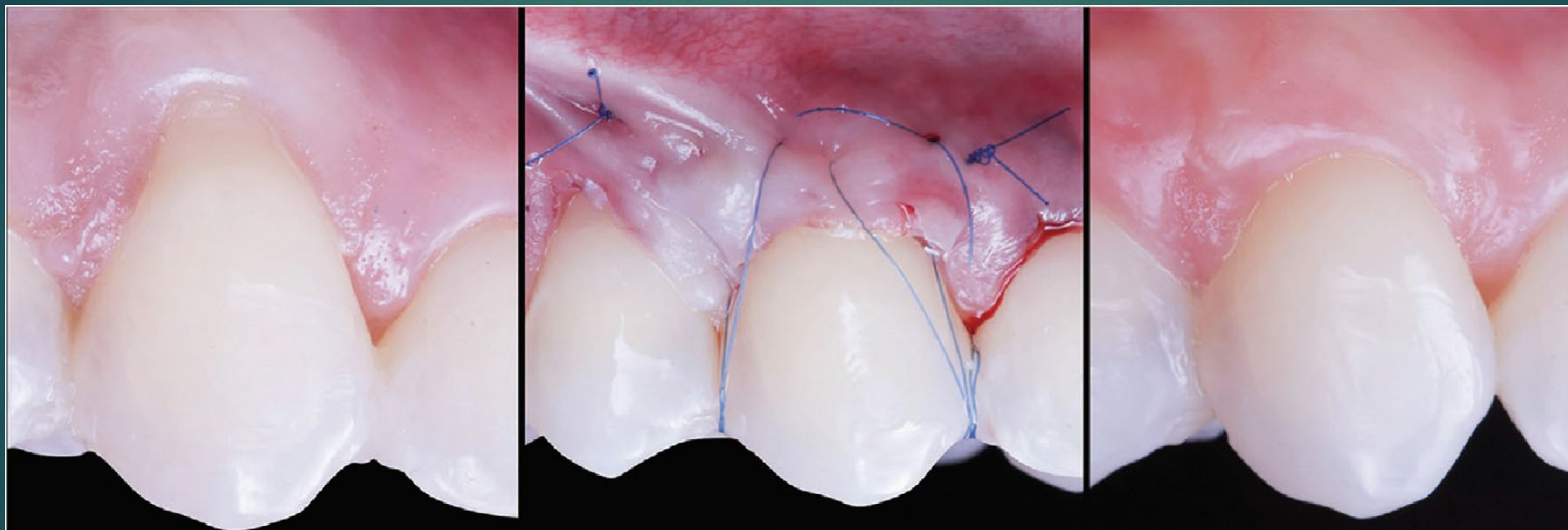
“V-Reverse” Suturing Technique

- ▶ Ramirez Sept 2021 (Clin Adv Perio)
- ▶ Technique for stabilizing graft/flap for tunnel procedures
- ▶ Uses interproximal composite stops for anchoring points for suturing
- ▶ Must have 2-3mm keratinized gingiva (sutures penetrate keratinized gingiva under flap and includes tunnelled graft)
- ▶ Tension free flap mobility required
- ▶ 4-0/5-0 proline most ideal for suture

Diagram



Surgical Case



V-Suturing around implant crowns

