

AlloDerm® Surgical Technique



Treating multiple tooth recession defects using the Alternate Papilla Tunnel Technique with AlloDerm

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Surgical Overview



Pre-op



Post-op

Alternate Papilla Tunnel Technique as described by:

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Treating multiple tooth recession defects traditionally requires a significant palatal tissue harvest to adequately supply enough donor material to successfully treat the defect. This often can lead to undesired surgical and post-surgical sequelae for both the surgeon and the patient. AlloDerm® Regenerative tissue matrix can be used as an effective alternative to palatal tissue in a wide variety of intraoral applications.¹ The following is an example of a suggested surgical technique for treating recession defects around teeth and dental implants. This technique can be modified to be applicable to the specific scenario being presented.

This guide is only intended as a reference, proper surgical procedures and techniques are the sole responsibility of the dental professional. Each surgeon must evaluate the appropriateness of the techniques based on his or her own dental training and expertise.

Pre-op

Figure 1



This technique will demonstrate the Alternate Papilla Tunnel Technique using interrupted sling sutures to secure the AlloDerm within the pouch. This will utilize papillary incisions alternating with tunneled papillae.

Patient presents with gingival recession from #10-13. Sufficient interdental papillae and minimal interproximal bone loss radiographically are observed. A typical Miller Class I or II defect is noted.

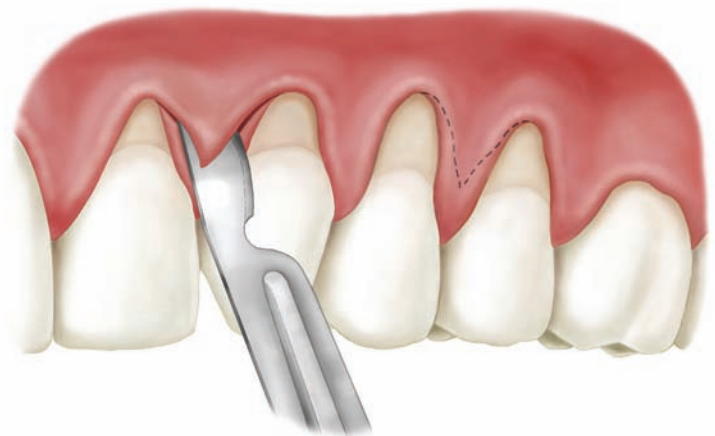
Rehydrate the AlloDerm according to the Instructions for Use provided with the product.

Incision

Figure 2

Begin with thorough root planing and root surface biomodification as determined by the surgeon and based on prior training and experience.

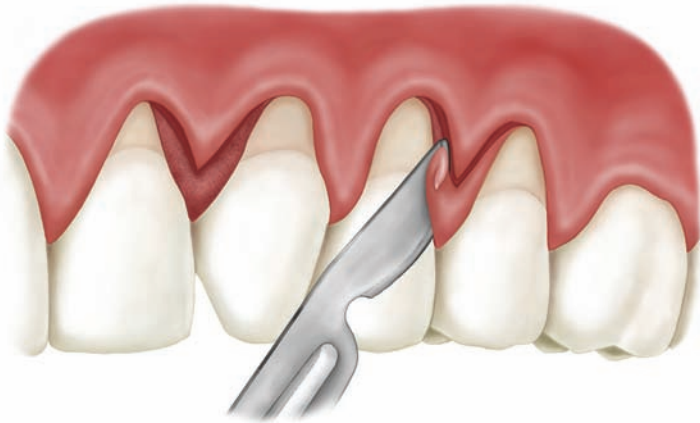
The pouch preparation begins with making papillary incisions approximately 3mm apical to the tip of the papilla between the lateral and canine and between the two premolars, leaving the papillae between #11 and #12 intact. Leaving various papillae intact helps prevent flap retraction and will improve the blood supply to the underlying graft.



Alternate Papilla Tunnel Technique

Denude Papillae

Figure 3

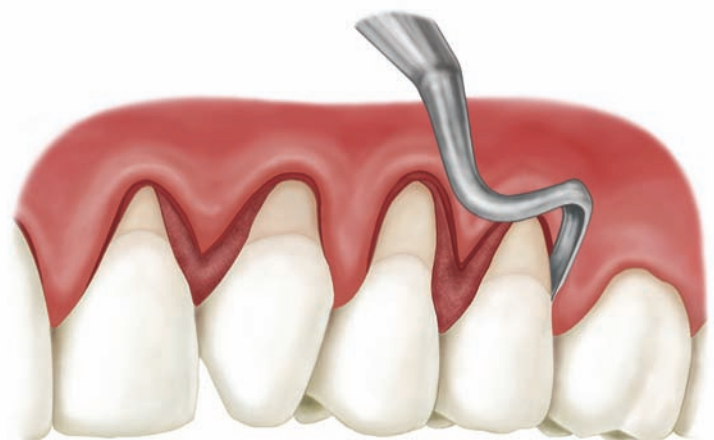


Denude the remaining facial papillary tissue coronal to the incised papillae to serve as a recipient site for flap advancement.

Intrasulcular Incisions

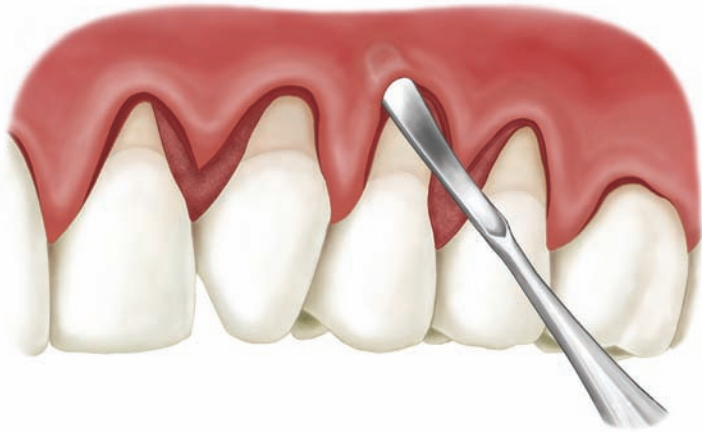
Figure 4

Using an End Cutting Intrasulcular Knife or similar microsurgical instrument, make sulcular incisions around each tooth with recession defects, extending laterally one additional tooth mesial and distal to facilitate flap mobilization.



Blunt Dissection

Figure 5

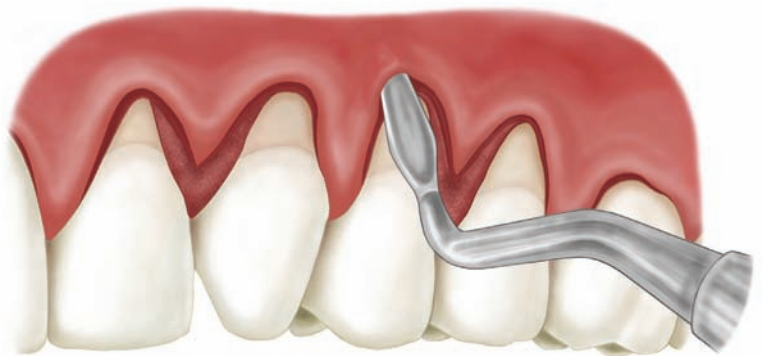


A microsurgical elevator is used to lift the tunneled papillae and elevate a mucoperiosteal pouch just past the mucogingival junction.

Sharp Dissection

Figure 6

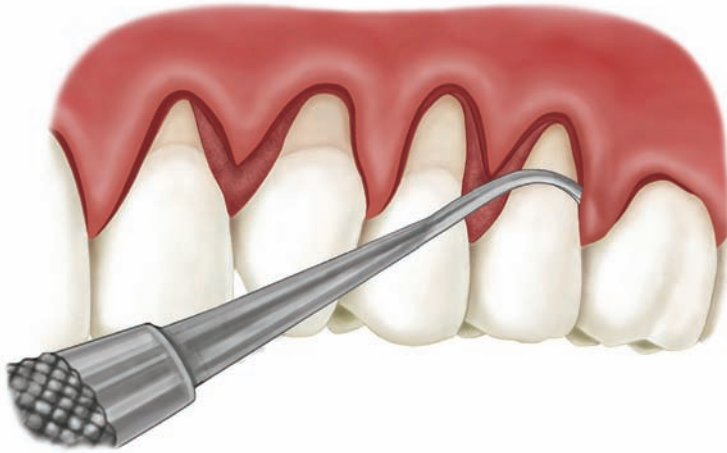
Using a Modified Orban Knife, sharp dissect immediately supraperiosteally to mobilize and extend the pouch 12-15mm from the gingival margin.



Alternate Papilla Tunnel Technique

Lift Papillae

Figure 7

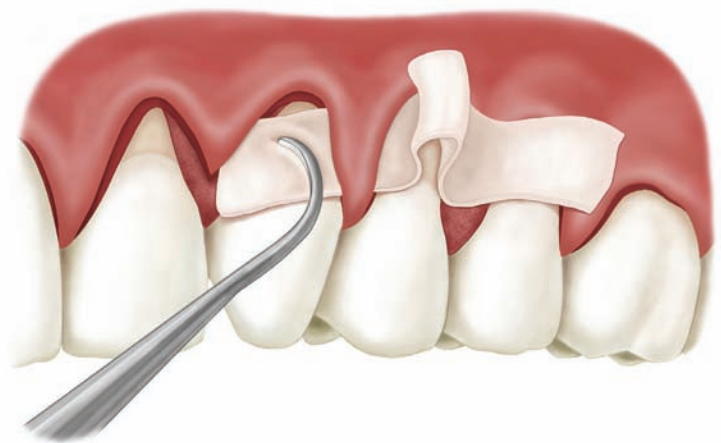


Lift the intact papillary tissue distal to the central incisor, between the canine and premolar and mesial to the molar, completely from the osseous crest using a Younger-Good curette or similar instrument. Extend this blunt (subperiosteal) reflection completely interproximally.

AlloDerm Insertion

Figure 8

Trim the AlloDerm graft to fit from the distal of the central incisor to the mesial of the molar, extending roughly 8mm tall. The graft is inserted into the pouch preparation under the intact papilla using a Younger-Good 7/8 curette or similar instrument. Position the graft with the reticular (connective tissue) side facing bone.



AlloDerm Placement

Figure 9

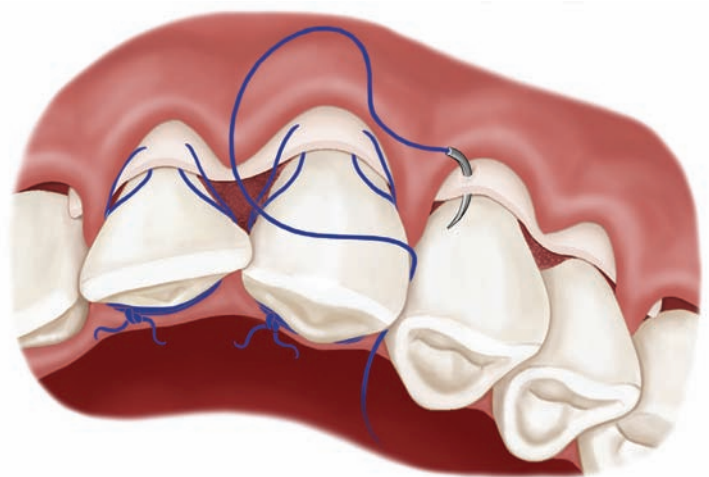


The graft should be advanced to extend from under the most mesial intact papilla to under the most distal papilla.

AlloDerm Suture

Figure 10

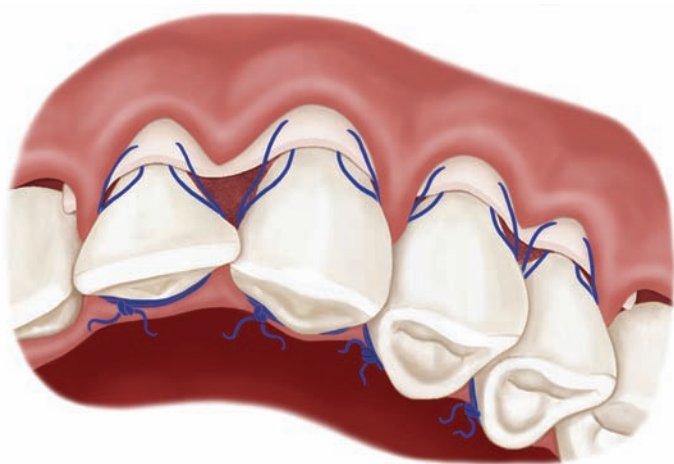
Place individual sling sutures, engaging only the graft, around each tooth tied on the palatal. 6.0 polypropylene sutures or a similar non- or slowly resorbing material is preferable.



Alternate Papilla Tunnel Technique

AlloDerm Suture

Figure 11

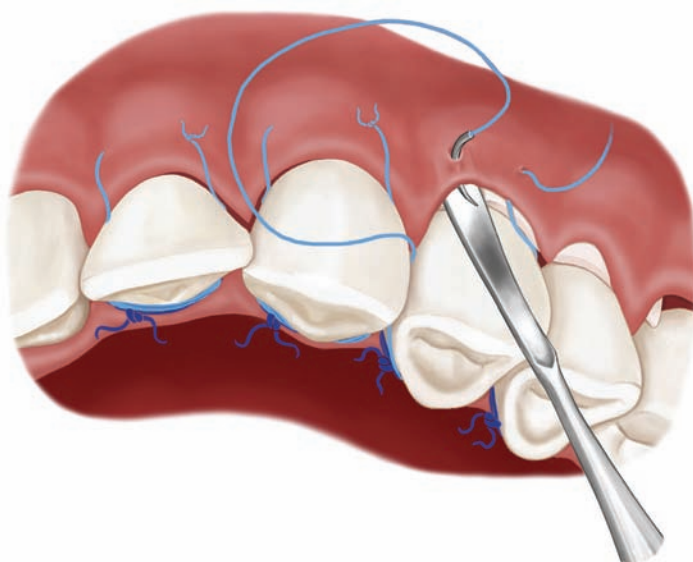


The graft is sutured independent of the overlying flap and carefully positioned at the cemento-enamel junction (CEJ). The sling suture should draw the graft under the intact papillae on the distal of the central and mesial of the molar. Take care not to draw the graft over the papillary beds previously denuded.

Flap Suture

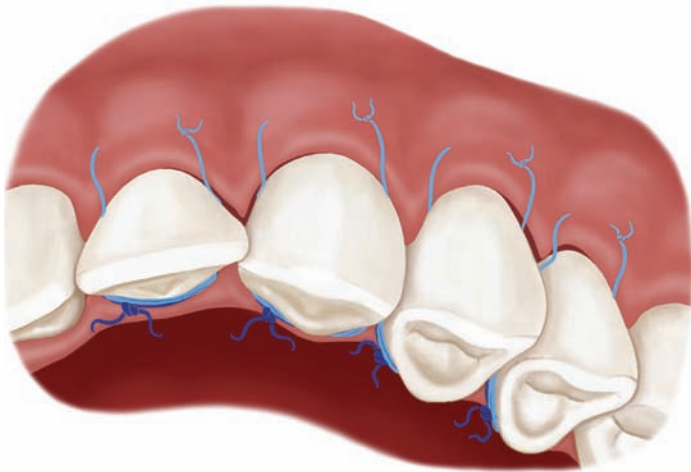
Figure 12

Coronally position the flap completely over the graft and stabilize with individual sling sutures tied on the facial. 6.0 polypropylene sutures or a similar non- or slowly resorbing material is preferable.



Flap Suture

Figure 13

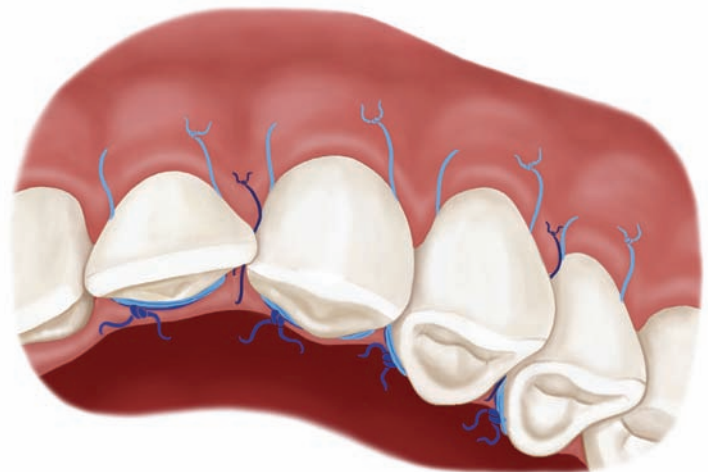


The flap should completely cover the graft and be positioned at the CEJ.

Mattress Suture

Figure 14

Place an interrupted suture through the incised papilla between the lateral and canine as well as the two premolars to secure over denuded beds.



Alternate Papilla Tunnel Technique

Post-op

Figure 15



Post operatively, an increase in root coverage and attached gingiva are observed.¹

AlloDerm[®]
Regenerative Tissue Matrix

Soft tissue replacement without palatal autograft harvesting

AlloDerm offers a safe alternative to autologous connective tissue for many soft tissue grafting indications. Multiple randomized clinical trials have indicated that there is no statistically recognizable difference between AlloDerm and connective tissue in terms of recession coverage.² Thickness varies from 0.9 to 1.6 mm.

Applications include:

- Root coverage
- Gingival augmentation
- Soft tissue ridge augmentation
- Soft tissue augmentation around implants

ALLODERM 1x1

ALLODERM 1x2

ALLODERM 1x4

ALLODERM 2x4

AlloDerm 1cm x 1cm

AlloDerm 1cm x 2cm

AlloDerm 1cm x 4cm

AlloDerm 2cm x 4cm

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Reference:

1. Histologic Evaluation of Autogenous Connective Tissue and Acellular Dermal Matrix Grafts in Humans. Cummings LC, Kaldahl WB, Allen EP. *J Periodontol* 2005;76(2):178-186.

2. Acellular Dermal Matrix for Mucogingival Surgery: A Meta-Analysis. Gapski R, Parks CA, Wang HL. *J Periodontol* 2005;76(11):1814-1822.

Not all products are available in all markets. AlloDerm and AlloDerm GBR must be shipped overnight.

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