


ACADEMY of GENERAL DENTISTRY AGD2021 THE PREMIER MEETING FOR GENERAL DENTISTRY AUSTIN, TEXAS JUNE 9 - 12 AGD2021.ORG

Principles of Surgical Extractions

Flap Design and Suturing for Dental Surgical Extractions





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Flap and Suturing for Surgical Extractions

Big Picture Parameters of Flap Design

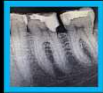
Flap Design Options


(Go Big) Areas to Avoid

Principles of Surgical Extractions


Model Surgery Participation




Tooth #3 With Sinus Closure



Tooth #19 Graft And Membrane



Teeth #23-26 Alveoplasty



Flap and Suturing for Surgical Extractions

Fundamental Parameters of Flap Design

- 1) The base of the flap must be broader than the free margins
- 2) Must be BIG enough to have access to both see and insert instruments
- 3) The retractor must remain on bone
- 4) The flap should not be under tension



Flap and Suturing for Surgical Extractions

Fundamental Parameters of Flap Design

- 5) Incisions should be at least 6 mm from bony defect
- 6) The flap design should avoid vital structures
 - Mandibular
 - lingual nerve
 - mental nerve
 - Maxillary
 - greater palatine nvb
 - nasopalatine nvb
- 7) Include the papilla
- 8) Avoid crossing bony prominences



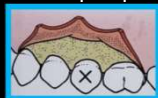
Flap and Suturing for Surgical Extractions

Flap Design Options

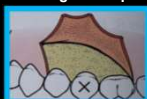
Mini Flap



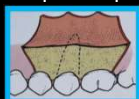
Envelope Flap



Triangular Flap



Trapezoid Flap



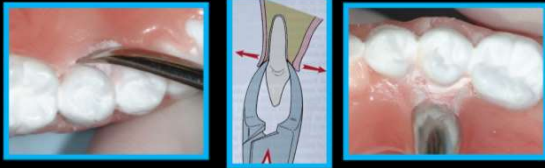
Semilunar



Flap and Suturing for Surgical Extractions

Mini Flap

Sulcular Reflection - No Release - Single Extractions - Suture Papilla

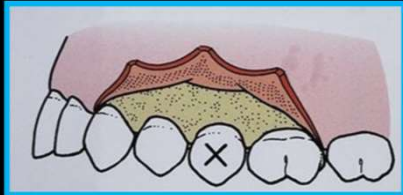


Periosteal Elevator Reflects Enough Tissue to Place Forceps Beak on Bone

Flap and Suturing for Surgical Extractions

Envelope Flap

Sulcular Incision - No Release - Multiple Extractions - Suture Papilla

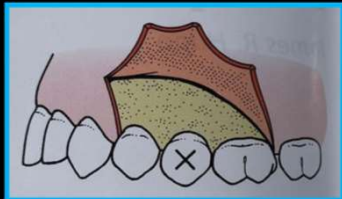


2 Teeth Anterior 1 Tooth Posterior
Access for Minimal Bone Removal

Flap and Suturing for Surgical Extractions

Triangular Flap

Sulcular Incision- 1 Release- Complicated Extractions- Suture Papilla & Release

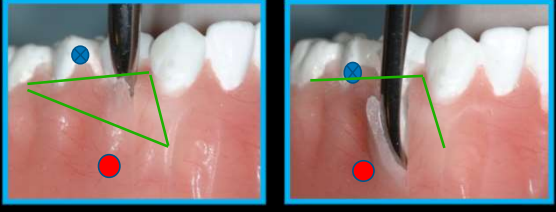


1 Tooth Anterior 1 Tooth Posterior
Access for Moderate Bone Removal

Flap and Suturing for Surgical Extractions

Triangular Flap

Sulcular Incision- 1 Release- Complicated Extractions- Suture Papilla & Release

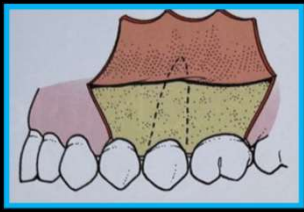


Good Or Bad ???

Flap and Suturing for Surgical Extractions

Trapezoid Flap

Sulcular Incision- 2 Release- Complicated Extractions- Suture Papilla & Release



1 Tooth Anterior 1 Tooth Posterior
Access for Significant Bone Removal

Flap and Suturing for Surgical Extractions

Trapezoid Flap

Sulcular Incision- 2 Release- Complicated Extractions- Suture Papilla and @ Release



Include the papilla on releasing incisions

Flap and Suturing for Surgical Extractions

Flap Reflection Demo w/ Periosteal



Flap and Suturing for Surgical Extractions

Trapezoid Flap

Sulcular Incision- 2 Release- Complicated Extractions- Suture Papilla and @ Release

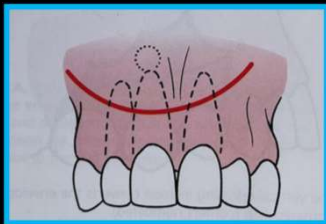


Include the Papilla on Releasing Incisions

Flap and Suturing for Surgical Extractions

Semilunar Flap


Sulcular Incision- No Release- Periapical Procedures- 1-2 Interrupted




Root tip removal or dislodgement through a buccal window

Flap and Suturing for Surgical Extractions

Suturing Questions



**Why
What
When**



Outcomes have shown that the single suture closure technique was better than the multiple suture technique with regard to postoperative pain, swelling, and trismus.
J Oral Maxillofac Surg 69:971-976, 2011

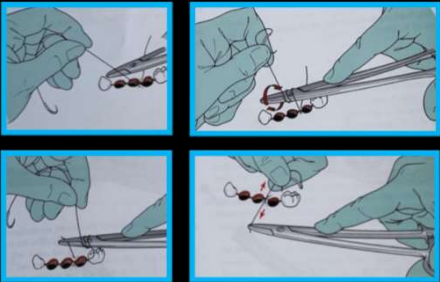
Flap and Suturing for Surgical Extractions

Basic Suturing Options

Regular Interrupted Suture
Reverse Interrupted Suture
Continuous-Lock Suture

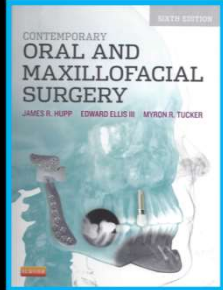
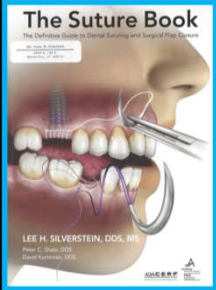
Flap and Suturing for Surgical Extractions

Tying the Suture Knot



Flap and Suturing for Surgical Extractions

Reference Books



Flap and Suturing for Surgical Extractions

Dr. Silverstein's Rule of 3s

- Needle penetrates 3 mm from the edge of the wound
- Sutures along an incision are 3 mm from each other
- Cuts the thread 3 mm from the knot
- Knot is 3 loops around the needle holder**
first two are same direction third loop is the opposite direction

Flap and Suturing for Surgical Extractions

Suturing a Releasing Incision



Needle goes from flap to fixed side



Only if the fixed side is tearing, do this

Flap and Suturing for Surgical Extractions

Regular Interrupted Suture



Flap and Suturing for Surgical Extractions

Reverse Interrupted Suture

Better for Bone Grafts with Membranes
Doesn't Snag the Membrane with a Graft



Flap and Suturing for Surgical Extractions

Continuous-Lock Suture

Easy and Fast for Long Span Surgical Sites
May Add Interrupted Over the Top to Secure



Flap and Suturing for Surgical Extractions

Some Additional Notes on Suturing:

- Chromic Gut is best for exodontia lasts 5 days and is resorbable
- Reverse Cutting is less traumatic to tissue than a "cutting" needle
- 3/8 Circle Needle is best for exodontia longer stretch to the lingual
- Hemostats should not be used to tie sutures, only needle holders
- 3.0 or 4.0 are most commonly used
- Plain gut keeps strength for only 1-2 days



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Questions ?



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