


ATRAUMATIC EXTRACTIONS & RIDGE PRESERVATION

Preparing Implant Receptor Sites



AFTERNOON SCHEDULE

Noon – 1:30pm
Site Preservation & Site Augmentation Hands-On


1:30pm – 1:45pm
Break (be sure to visit the sponsors again!)

1:45pm – 4:00pm
Lecture – Implants for the General Dentist
Question & Answer session
Course Evaluations and CE Verification




TWO GENERAL CLASSIFICATIONS OF EXTRACTIONS

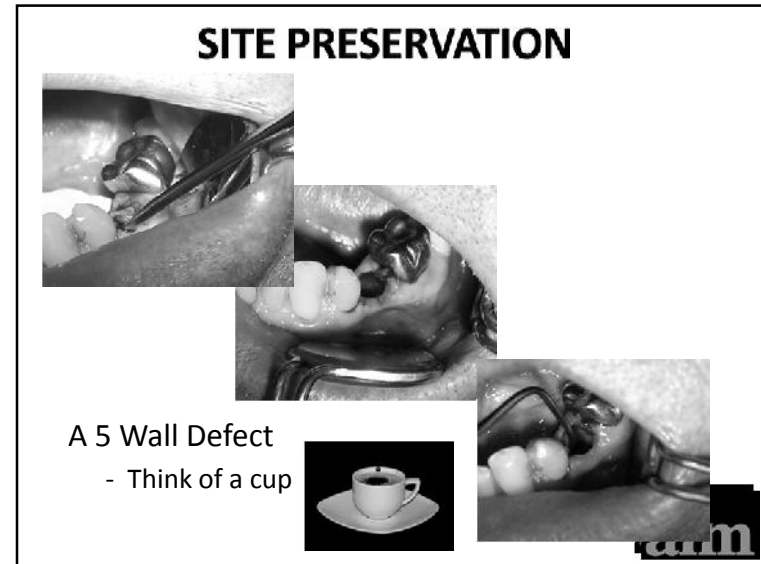
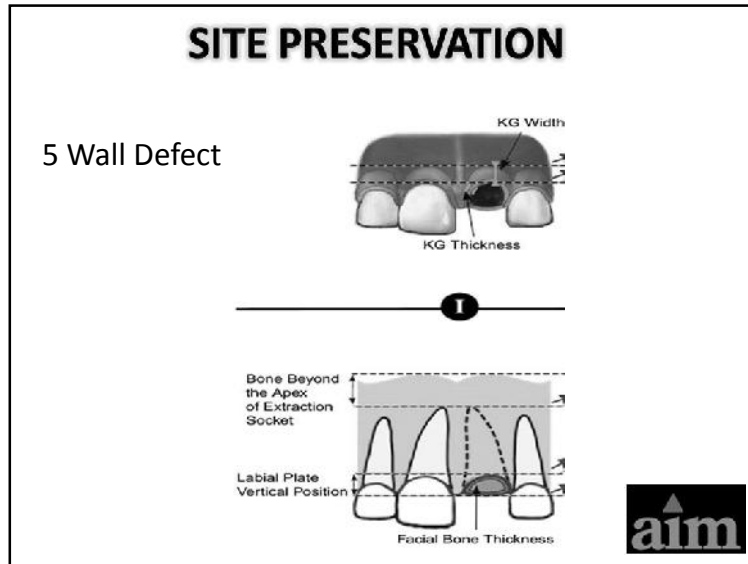
**Site Preservation
Site Augmentation**



SITE PRESERVATION

Removing a Tooth Without Removing Bone





SITE PRESERVATION

Five wall defect

Curette the site really well

Get some bleeding from the socket

Use the following to fill the socket

- Collaplug/Collatape
- Bone product?

Wait about 16 weeks before implant placement

SITE PRESERVATION

Occurs at the time of the atraumatic extraction

- Buccal and lingual plates remain intact (5 wall defect)

PDM thoroughly removed

Much bleeding is ideal

Collaplug/Collatape placement (along with collected blood) if timing for implant placement is determined and consented to at this time

- If questionable commitment to the timing for placement of the implant, then treat it like a site preparation procedure.

ACE COLLAGEN PRODUCTS



Collagen Plug

- Fully absorbable
- Ideal for extraction sockets
- Controls bleeding
- 1cm x 2cm, Sterile 10/box

Collagen Foam

- Same benefits as above
- 2cm x 4cm, 3mm thick, Sterile, 10/box

Collagen Tape

- Same as above
- 2.5cm x 7.5cm, 1mm thick, Sterile 10/box

THE RIGHT CHOICE FOR HEALING



SITE PRESERVATION

HANDS ON




SITE PRESERVATION HANDS-ON

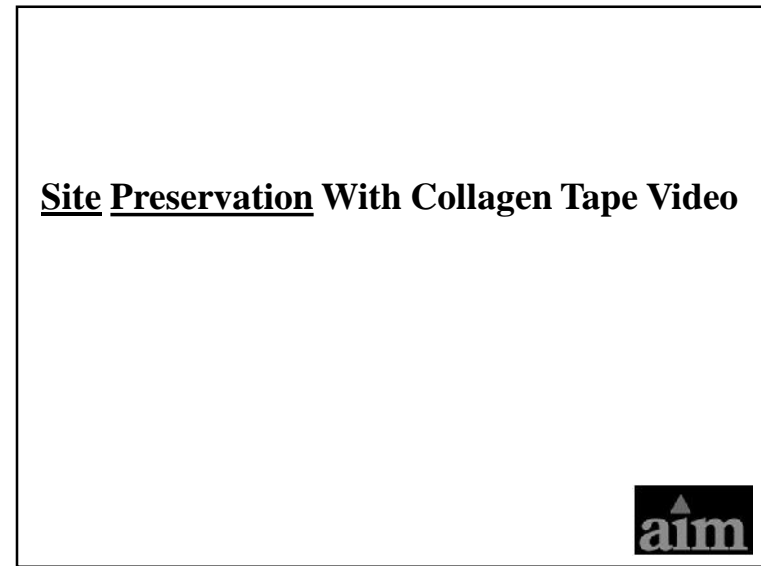
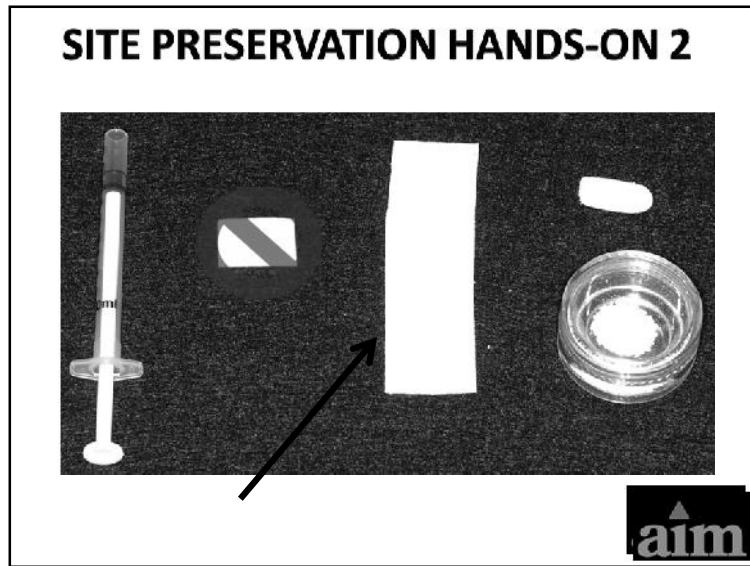
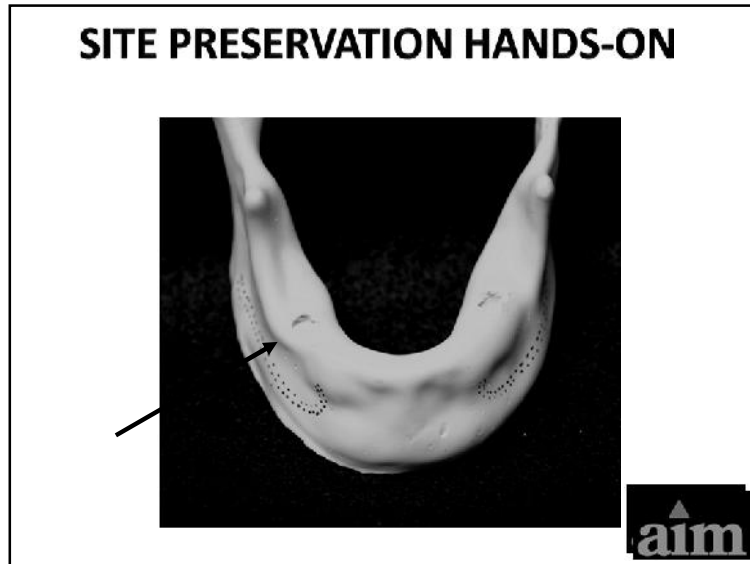


SITE PRESERVATION HANDS-ON



Just the lid is used at this time!





SITE PRESERVATION HANDS-ON

Let's Do It!



SUTURE MATERIALS

- **VICRYL 4-0**
 - Resorbs In 3-4 Weeks internally
- **Chromic Gut 4-0** –
 - Resorbs in 2 Weeks
- **Silk 4-0** –
 - Does Not Resorb
 - Retains bacteria
 - Wicking effect
- **Butylcyanoacrylate**



TISSUE CLOSURE

Suture ties (Vicryl sutures)

Suture technique

- Interrupted
- Continuous



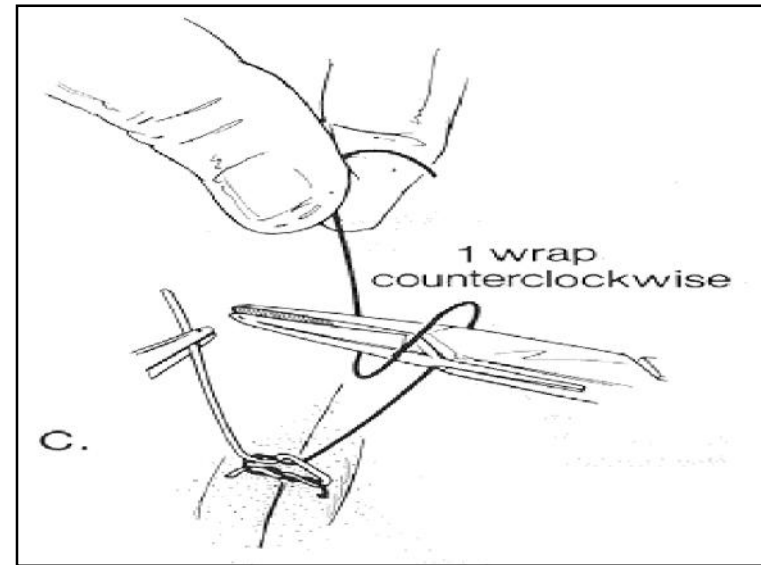
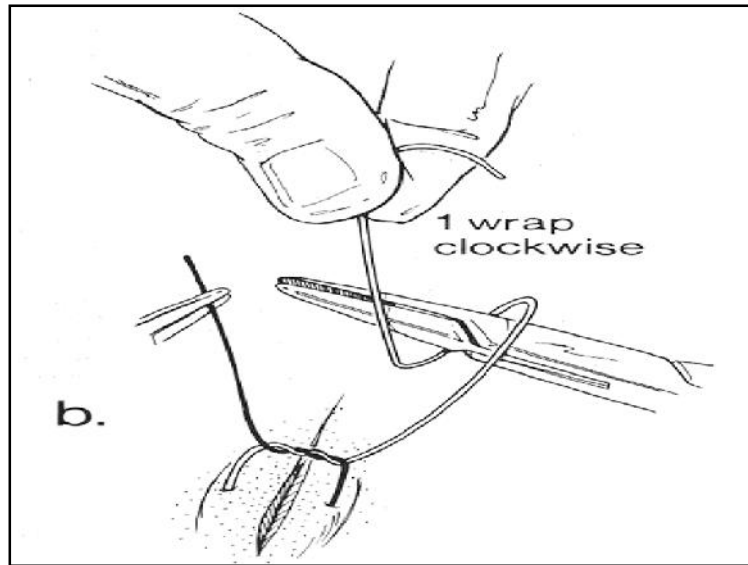
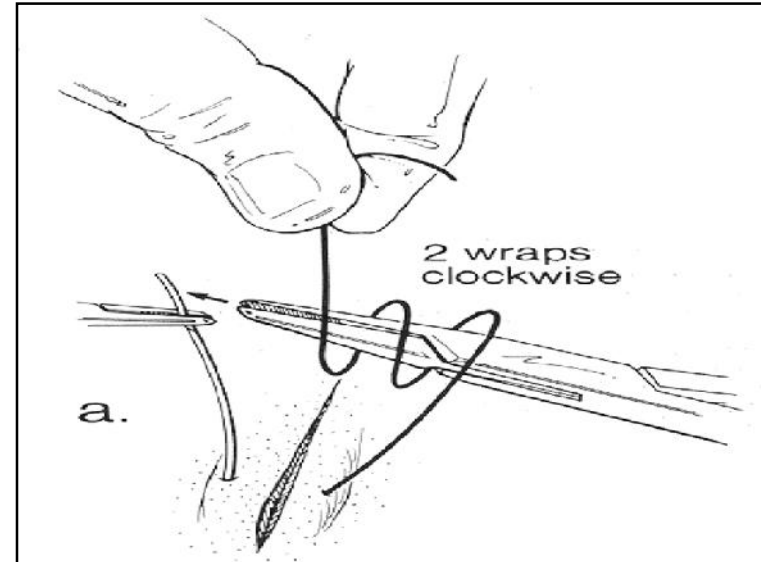
TISSUE CLOSURE

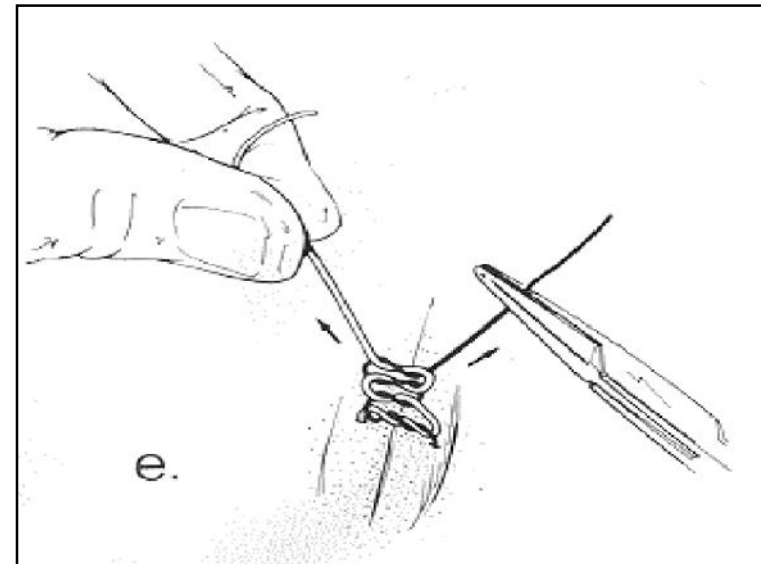
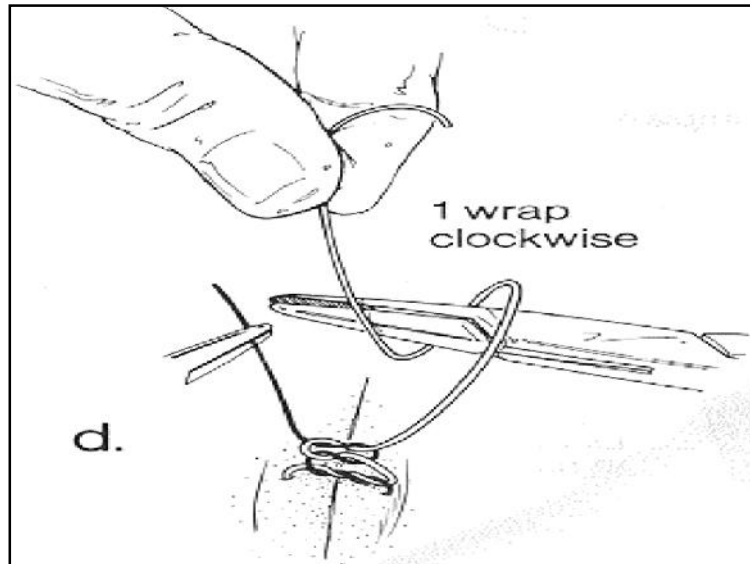
Suturing Technique



Site Preservation,
Instrumentation & Suturing Basics

Stop video at 6:49 timing mark





SUMMARY OF POLYGLACTIN KNOT

Double granny forward

- Light pressure then hold

Single granny forward

- Light pressure then hold

Single granny reverse

- Pull tightly then hold

Single granny forward

- Pull tightly to lock then hold

Trim with 2mm length ends



SITE PRESERVATION HANDS-ON

Let's Do It!



SITE PRESERVATION HANDS-ON 2

Remove Collatape to Prepare for the Next Exercise!



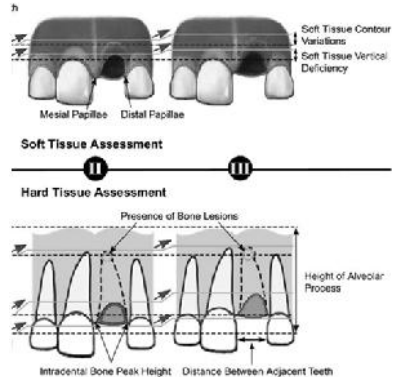
SITE AUGMENTATION

A Wall of Bone is Lost Prior to
or
During Tooth Removal




SITE AUGMENTATION

4 Wall Defect




The diagram illustrates a 4-wall defect with two cross-sectional views of teeth. The top view shows soft tissue contours with labels for 'Mesial Papillae' and 'Distal Papillae'. It notes 'Soft Tissue Contour Variations' and 'Soft Tissue Vertical Deficiency'. Below this is a 'Soft Tissue Assessment' with a scale from I to III. The bottom view shows 'Hard Tissue Assessment' with labels for 'Presence of Bone Lesions', 'Height of Alveolar Process', 'Intra-canal Bone Peak Height', and 'Distance Between Adjacent Teeth'. The 'aim' logo is in the bottom right corner.

SITE AUGMENTATION



4 Wall Defect –
– This cup can't hold much



SITE AUGMENTATION

Occurs at the time of the *traumatic* or diseased extraction

- Buccal and/or lingual plates are not remaining
- OR – if the predetermined timing for implant placement is not committed to or vague.

PDM and granulation tissues are thoroughly removed

Much bleeding is ideal

Reflect attached gingiva to 2-3 mm past bone margins in all areas



SITE AUGMENTATION

Particulate is hydrated with collected blood (or sterile saline/sterile water), it is then placed into the extraction site, and then covered with a resorbable membrane

Flaps are sutured to place with polyglactin sutures

Patient placed on Clindamycin 150mg q6h for 7 days

Sutures stay in place for 2 weeks!

Ultrasoft brush and antimicrobial rinse is given to cleanse the site



MATERIALS

Collagen products

Bone products

Resorbable membranes

Suture material



GRAFT COMPOSITE

Clindamycin – if infection at site

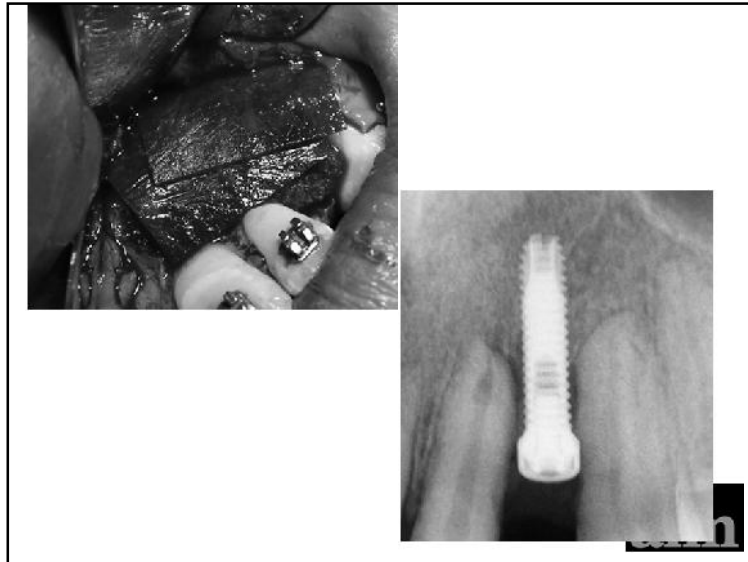
- Effective against streptococci and staphylococci and gram (-) rods
- Low incidence of pen allergy

NuOss or AlloOss (bone product)

Type I collagen membrane

- RCM6
- Slow resorbing





SITE AUGMENTATION HANDS-ON

Lower left on technique mandible simulating a molar extraction

Nu-Oss

RCM6 Membrane

Silk suture (instead of Vicryl)

Diluted ketchup (instead of collected blood)

Furcal Bone...to keep or not to keep.



SITE AUGMENTATION HANDS-ON

Xenograft (Nu-Oss)
Membrane (RCM-6)



SITE AUGMENTATION HANDS-ON

Let's Do It!



FEES & INSURANCE CODING

Site Preservation

- ADA code – D7953
- Plus the extraction of the tooth fee
- Five-walled defect + Collagen Plug or Collagen Tape
- ~ \$185.00

Site Augmentation (at the time of extraction)

- ADA code – D7953
- Plus the extraction of the tooth fee
- Four or less walls/timing until implant placement considered
- + Particulate bone (included in fee)



Soft Tissue Management



TISSUE FLAPS CRITERIA

- Maintain periosteum and blood supply.
- Clear visualization of surgical site.
- Easy access for surgical team members.
- Effortless reflection of the tissues for the surgical team members.



TISSUE FLAPS TECHNIQUE

- Scalpel penetration contacts bone.
- Full thickness tissue reflection-
 - Sharp edge of periosteal elevator faces the bone.
- Use the thumb to resist the pressure of the periosteal elevator against the tissue.
- May require use of curette to relieve the tissue at the distal aspect of the last tooth.
- Remove all tissue tags with instrument and/or wet gauze.



TISSUE FLAPS DESIGN

“Establishing non-tension primary closure over a dental implant and/or bone grafted sites begins with proper Soft Tissue Management”

Soft Tissue Management for Implant Dent: A Clinical Guide Heller, Heller et al. JOI, No. 2/2000



TISSUE FLAPS DESIGN

Non Tension Primary Closure Benefits:

- Shortens soft tissue healing time
- Contains graft materials
- Reduces infection potential
- Less painful healing
- Allows tissue expansion with post operative swelling
- Helps maintain blood supply



TISSUE FLAP THE TRAPEZOID DESIGN

The trapezoid design includes a wider tissue attachment at the base of the flap which improves the following factors:

- Blood supply
- Lymphatic drainage
- Periosteal integrity

Facilitates non tension vertical closure with bone grafting

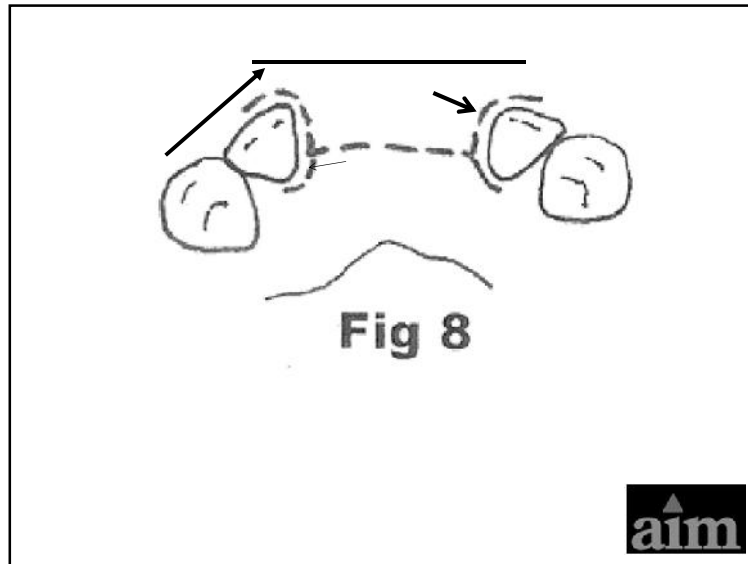


INTERDENTAL FLAP DESIGN

Trapezoid shape still applies

Carry incision to the adjacent papilla with limited attached gingiva to avoid tearing.





TISSUE CLOSURE

Non tension soft tissue flap closure is essential for a successful surgical result.

