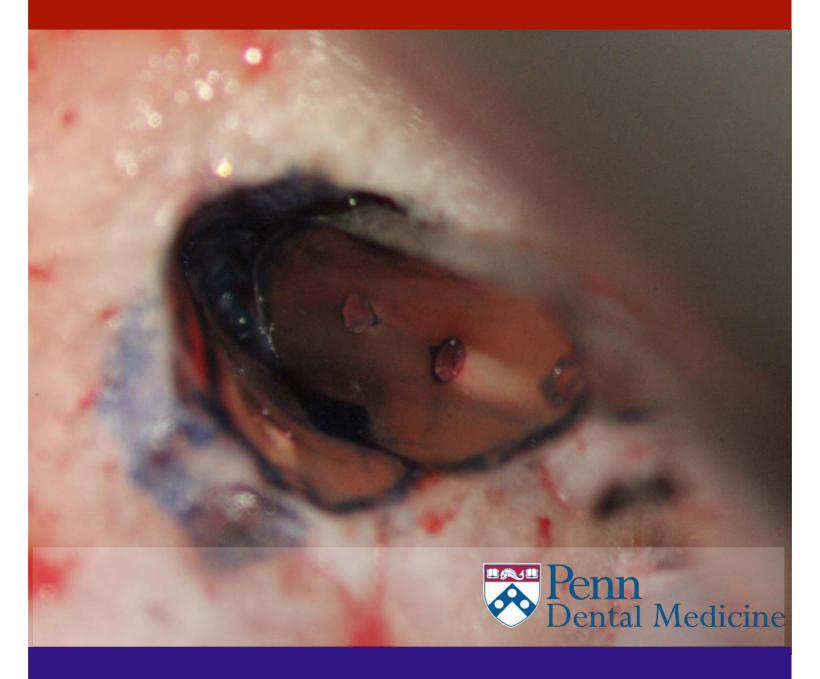
### Penn Endo Surgical Documentation



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Surgery Site Before Removing Flap

Magnification: Low (4x)

Pictures should be taken after anesthesia.

#### Surgical site

<u>Purpose:</u> To show the surgical site, tissue whitening, status of teeth.





#### **Probing**

<u>Purpose:</u> To show probing depths, any abnormal appearance, sinus tract.







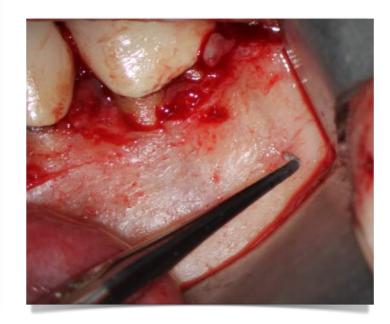
#### Surgery Site After Removing Flap

Magnification: Low (4x-6x)

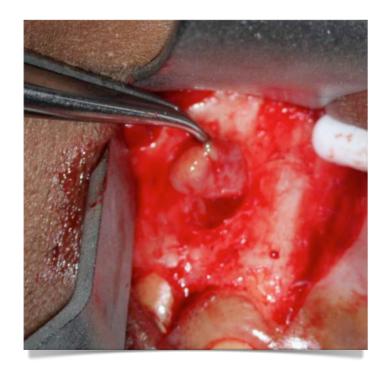
#### Surgical site

<u>Purpose:</u> To show the surgical site, bone fenestration, granulation tissue, root fracture, location of mental foramen.

Area of interest should be centered and well focused.













Surgery Site After Removing Flap

Magnification: High (16x-24x)

Pictures taken after methylene blue application. Pictures with direct vision and through mirror.

#### **Resected Root Surface, Root-end Preparation**

<u>Purpose:</u> To show resected root outline, canal anatomy, missed canals, isthmus, root fracture, root-end preparation, root-end filling.

Images should show entire PDL around resected root surface and all canals. Focus is on root surface.











Surgery Site After Removing Flap

Magnification: Mid (4x-8x)

Pictures taken after methylene blue application. Pictures with direct vision and through mirror.

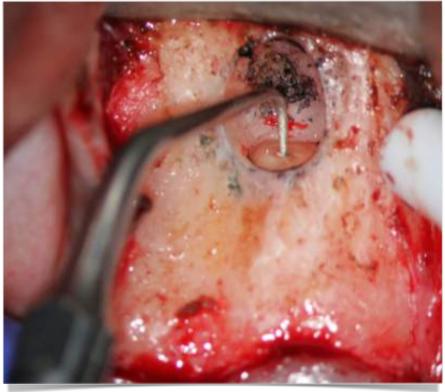
#### **Root-end Preparation**

<u>Purpose:</u> To show the orientation and the angle of ultrasonic tip preparing the canal.

Root-end preparation is done under low magnification, ultrasonic tip should be aligned with the long axis of the root towards the crown. Angle of ultrasonic tip should be aligned in a way that canal preparation will the original canal direction.



Interactive 1.1

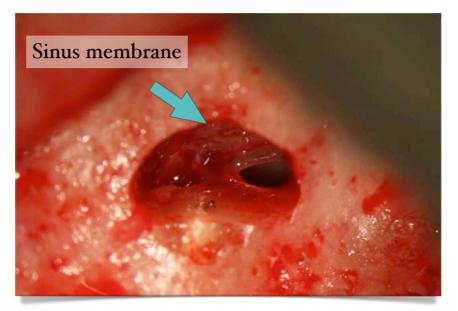


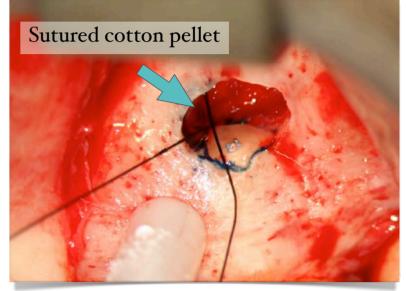


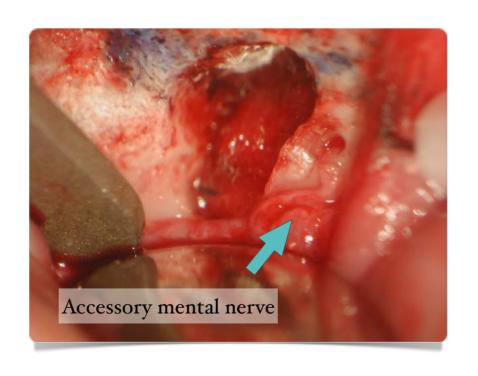
#### Surgery Site After Removing Flap

#### **Anatomical Details**

Purpose: To show mental foramen, sinus opening and protection.











Surgery Site Before Suturing

Magnification: Low- Mid (4x-10x)

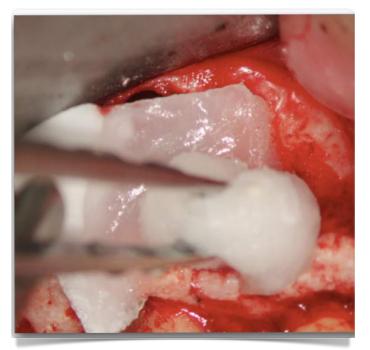
#### Surgical site

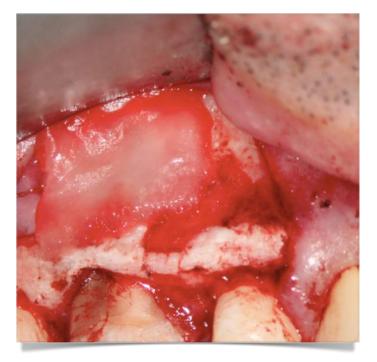
Purpose: To show the surgical site, osteotomy size, bone grafting material.













Surgery Site After Suturing, Follow-up

Magnification: Low (4x)

Pictures with direct vision and through mirror. Pictures with a direct angle.

Surgical site

Purpose: To show the surgical site, suturing, soft tissue healing.











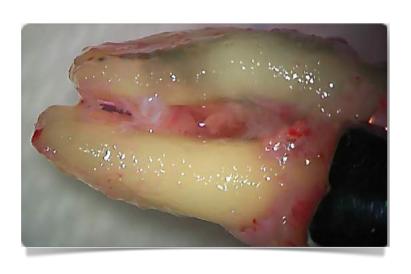


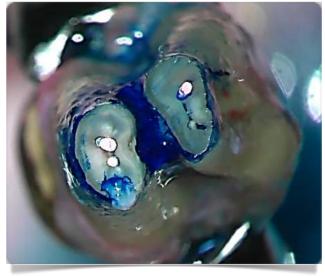
#### Intentional Replantation

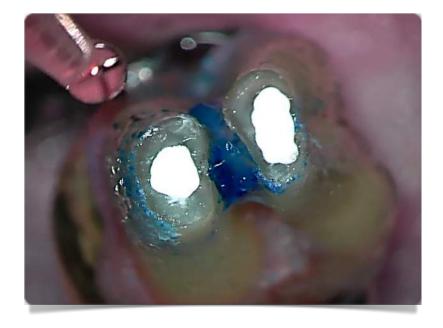














#### Magnification

| Non-Surgical Endodontics  | Surgical Endodontics   |
|---|--|
| Low Magnification ~ 4x  |  |
|   | orientation inspection of surgical site initial osteotomy ultrasonic tip alignment suturing (6.0+) suture removal                                  |
| Mid Magnification ~ 10x   |  |
| access orifice identification fracture identification obturation  | hemostasis tissue removal root-tip identification root-tip resection root surface inspection root-end preparation root-end filling root amputation |
| High Magnification ~ 20x  |  |
| orifice identification fracture identification calcified canal location identification of fine anatomical details documentation | root surface inspection root-end preparation inspection root-end filling inspection identification of fine anatomical details documentation        |



Report to Referring Dentist

