

ENDOSCOPIC SINUS SURGERY

Failures & Revisions

Aetiology

○ What are the most important causes of failure of ESS?

○ **Iatrogenic:**

1. Poor surgical technique.
2. Inadequate postoperative care.

○ **Environmental factors:**

1. Tobacco smoke, allergens, air pollutants.

○ **Host factors:**

1. Difficult case , asthma, aspirin intolerance, immunodeficiencies.

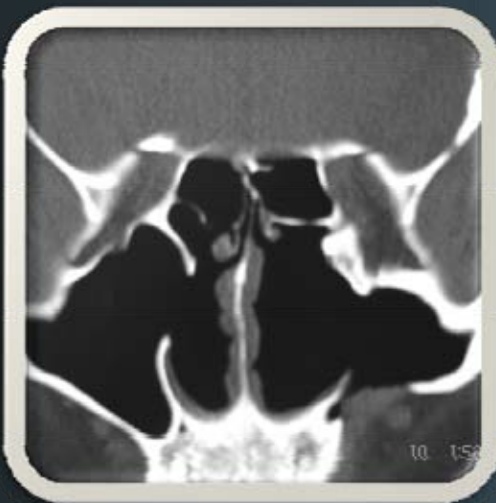
The Problem of Osteitis / Osteoneogenesis



- How it develops?
- Is it important? Why?

- How to avoid?
- How to manage?

Empty Nose Syndrome



- Pathogenesis?
- How to avoid?
- How to Manage?

Nasal Washes (Irrigations)

- Preferred type?
- Hypertonic solutions?
- Risk of introducing infection?

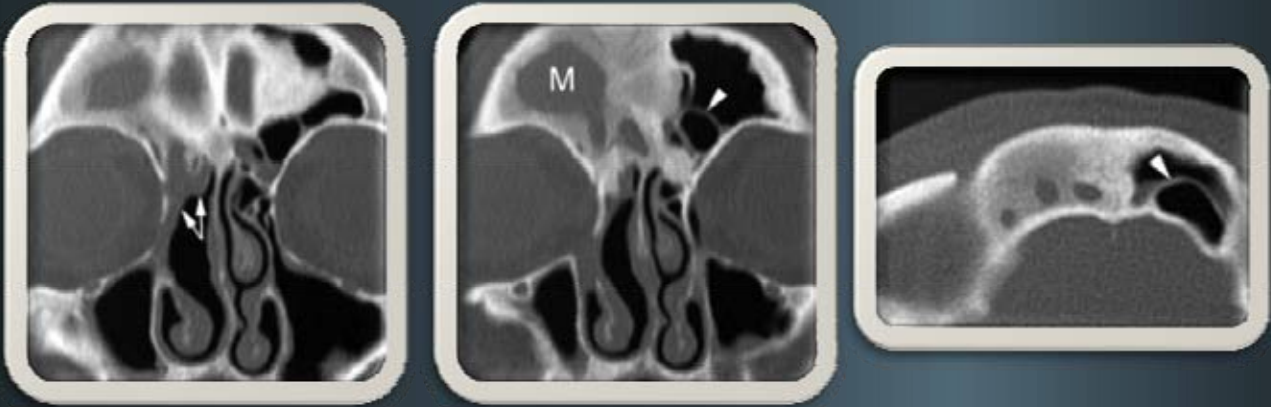


Dealing with the Middle Turbinate

- How to correct this case of scarred lateralized middle turbinate?
- Preserve, medialize, or partially resect blocking middle turbinate?
- What part to resect?



Case # 1 : Frontal Sinus Mucocele



- What is the problem in this case?
- What is the solution ?

Revision ESS of the Frontal Sinus

- Common causes of persistent postsurgical frontal sinus disease :

- Retained superior uncinate process.
- Laterlized middle turbinate.
- Persistent disease in aggar nasi cell.
- Scarring in the frontal recess.

Revision ESS of the Frontal Sinus

- What are the useful landmarks for the identification of the frontal recess in revision surgery?

- Anterior ethmoid artery.
- Skull base.
- Attachment of the middle turbinate to the skull base.

Approaches for Revision Frontal Sinus Surgery

- Endoscopic frontal sinusotomy.
- Frontal trephine as an adjuvant procedure “above and below approach”.
- Endoscopic trans-septal procedure “Draf III or modified Lothrop”.
- Obliterative procedures.

- What are the indications of the modified Lothrop procedure?

Case # 2 : persistent Postsurgical Maxillary Sinusitis



○ What are the causes of persistent maxillary infection in this case?

Case # 2 : Persistent Postsurgical Maxillary Sinusitis



○ Does removal of the uncinate process increases the exposure of the maxillary sinus to allergens and pollutants?

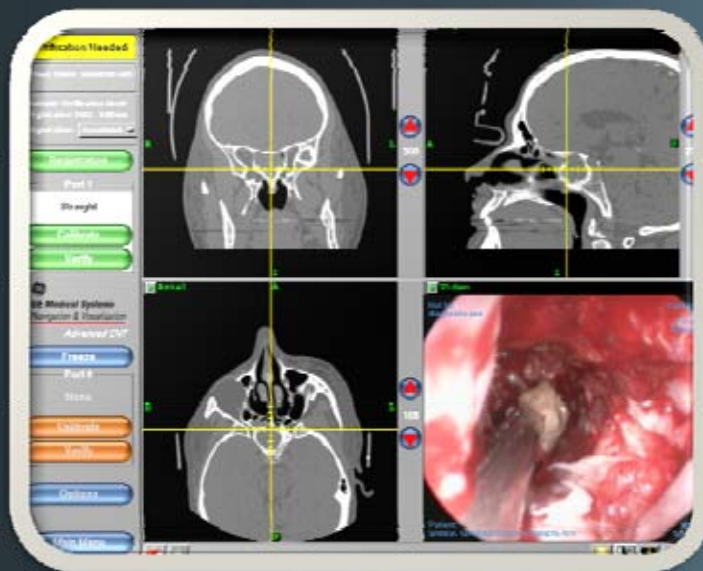
Cases # 3 : Persistent Postsurgical Ethmoid Disease

- Common findings include:

Total ethmoidectomy in every case vs. conservative approach ?



Persistent Sphenoid Sinus Disease



What are the possible causes of residual / recurrent sphenoid sinus disease?

Revision Sphenoid Sinus Surgery

- Transethmoid or transnasal approach ?
- Landmarks for identification of the ostium?
- How to avoid re-stenosis of the widened ostium?

Case # 4



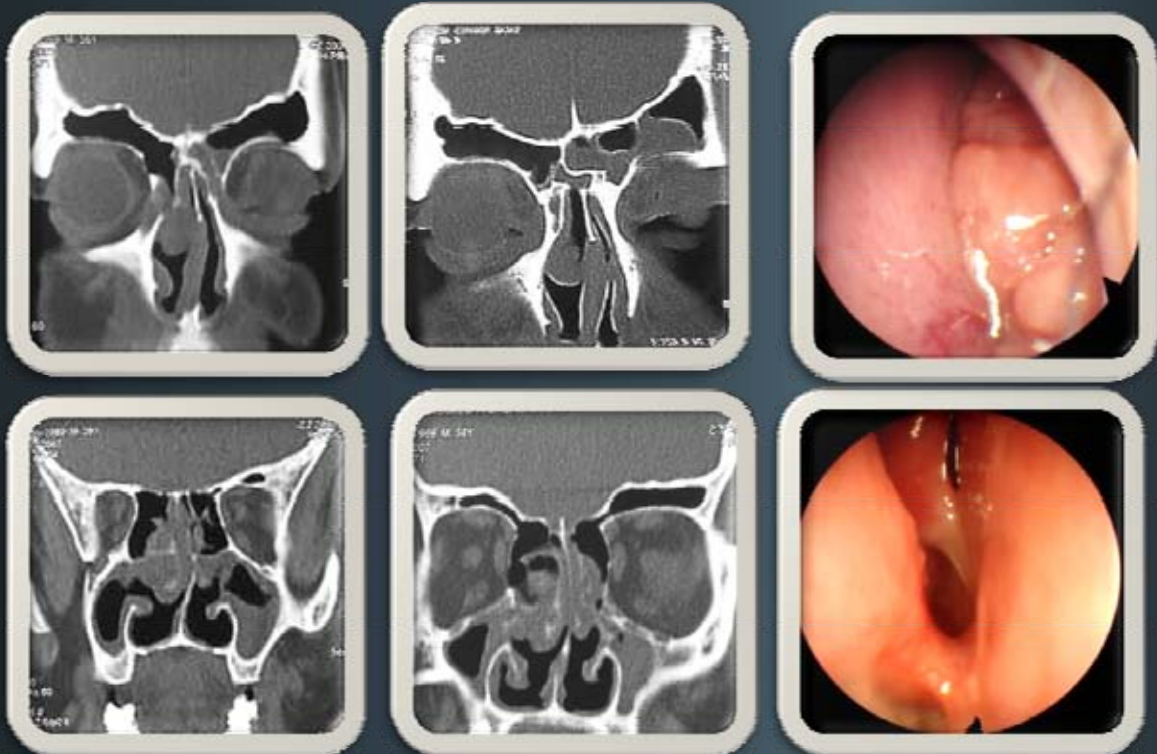
- What are the problems in this case?

Case # 4 : Preoperative



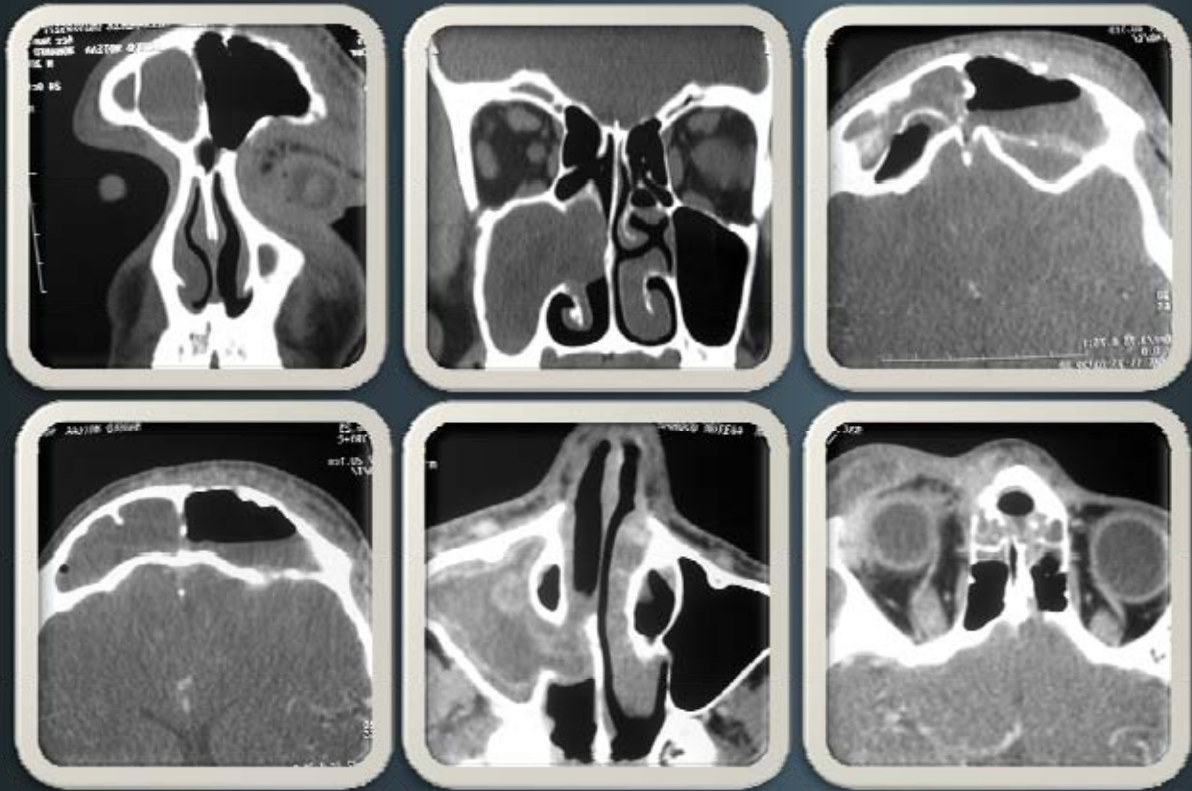
- The patient is atopic.

Case #4 : Postoperative



- What are the causes of this result?

Case # 5 : Preoperative



Case #5 : Postoperative



Repetitive FESS Failures

- What are the most common causes?
- Videler et al (2006) found that radical surgery (e.g. Denker's operation) is a viable treatment option in patients with ESS-resistant chronic rhinosinusitis .

○ Do you agree with this concept? Why?

- Otolaryngology-Head and Neck Surgery (2008) 134, 586-591

ESS in Geriatric Patients

Rhinosinusitis is the sixth most common chronic condition of those aged 65 and older (Colclasure et al, 2004)

- Do geriatric patients have higher rates of surgical failures or complications?
- Do they need longer lengths of hospitalization?

- Otolaryngology-Head and Neck Surgery (2004) 131, 946-949

ESS with Normal CT Scans

○ Cook et al (1994) suggested that ESS may be indicted in patients with recurrent acute sinusitis in the absence of pathological findings on CT scans because even minor changes at the OMU can be significant.

○ Do you find this concept justified ?

○ Can it a cause of false ESS “failure”?

- Otolaryngology-Head and Neck Surgery (1994) 110, 505-509

ESS with Normal CT Scans

○ Does our decision not to get CT scans of acute sinusitis patients until they were adequately treated may have caused a false negative results on some CT scans ?

THANK YOU