Patient Selection

- Patient Factors
- Anatomic Factors
- Disease Factors

Patient Selection – Patient Factors

- Typically, frontal sinus inflammation not approached at primary surgery if ethmoid disease is predominant
- Fully exhaust medical treatment
  - Antibiotics/oral steroids – culture directed antibiotics
  - Topical steroid spray
  - Topical drops – Pred Forte 1% - 4 gtts BID in Moffit position
  - Time!

Patient Selection – Patient Factors

BE CAUTIOUS ABOUT HEADACHE SYMPTOMS
- Correlate symptoms with areas of disease
- Obtain neurologic consultation if questions exist
- Correlate pressure/pain with URI and other sinus symptoms

- Sinus surgery for headache in the absence of sinusitis is not commonly effective ~18% Levine 2004
- Sinus surgery in the setting of sinusitis can be helpful for “headache” in 75% of cases Levine 2004
- Exercise CAUTION on surgery for pain


Patient Selection – Disease Factors

- Recurrent infection
  - Document infection well

- Mucocele
  - Open and maintain patency

- Chronic infection
  - Open sinus to prevent closed space infection/mucocele
  - ASA triad patients – poor candidates for complete resolution
  - Patients with diffuse, non AFS mucosal disease also poor candidates for resolution

Patient Selection – Anatomic Factors

- Is there room enough to operate?
  - May need extended endoscopic approach
    - Draf IIb, III
  - May need open approach
    - Frontoethmoidectomy
    - Osteoplastic flap w/ or w/o obliteration

Endoscopic Treatment Options

<table>
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### Draf Classification Type IIa

![Diagram](image1)

Removal of frontal sinus floor from septum to orbit

Cells of ethmoid, agger nasi, and middle turbinate root

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### Draf Classification Type IIb

![Diagram](image2)
## Endoscopic Classification

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<tr>
<td>III</td>
<td>Type II drainage on both sides and removal of the upper part of the nasal septum and the lower part of the frontal sinus septum</td>
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## Draf Classification Type III

- Removal of frontal sinus floor from orbit to orbit
- Cells of ethmoid, agger nasi, and middle turbinate root
- Care should be taken to avoid mucosal trauma

![Diagram of Draf Classification Type III](image-url)

## Draf Classification Type III

- Curvilinear incision in superior septum
- Removal of mucosa and bone, exposing frontal rostrum
- Use landmarks of one frontal recess to drill/bite floor

![Diagram of Draf Classification Type III](image-url)
Maximizing Your Results

PRE TREAT patients with antibiotics +/- prednisone
- Antibiotics for 3 weeks beginning 10 days pre-op
- Prednisone 40 mg x5 days, 30 mg x5 days…
This has made me a happier person 😊
- Less inflammation
- Less bleeding
- Better visualization
- ? Less scarring
- Optimizes patients’ asthma

Post operative care
- Gentle debridement – suctioning and little else
  – I rarely touch the frontal recess for 4 weeks
  – Allow healing to take place!
- Steroids – oral and topical
  – Continue perioperative steroids ~ 1-6 weeks
- Retreat if infection recurs
  – I tell patients that they may be retreated in first 2 months
- Topical pred forte drops 1% if edema persists

Conclusions
- Frontal sinus surgery should be undertaken only after other options have been exhausted
- Gentle handling of mucosa and through cutting instruments can assist in prevention of scarring and stenosis
- Careful selection and perioperative care can improve results and keep the patient and surgeon happy