How to get rid of Block Nose & Sinusitis

The Fuss-free way

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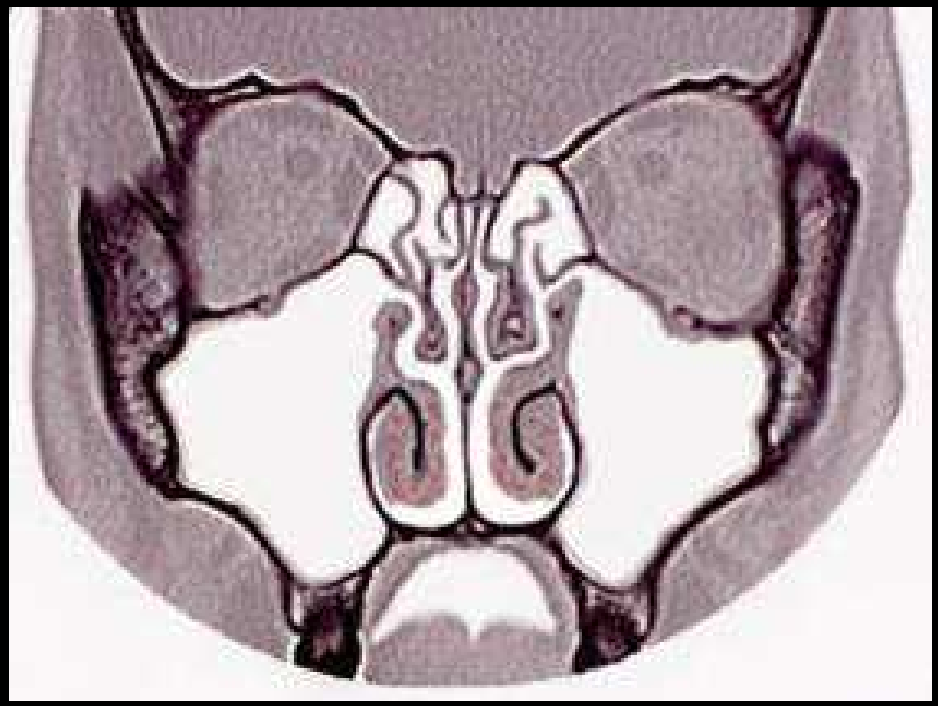
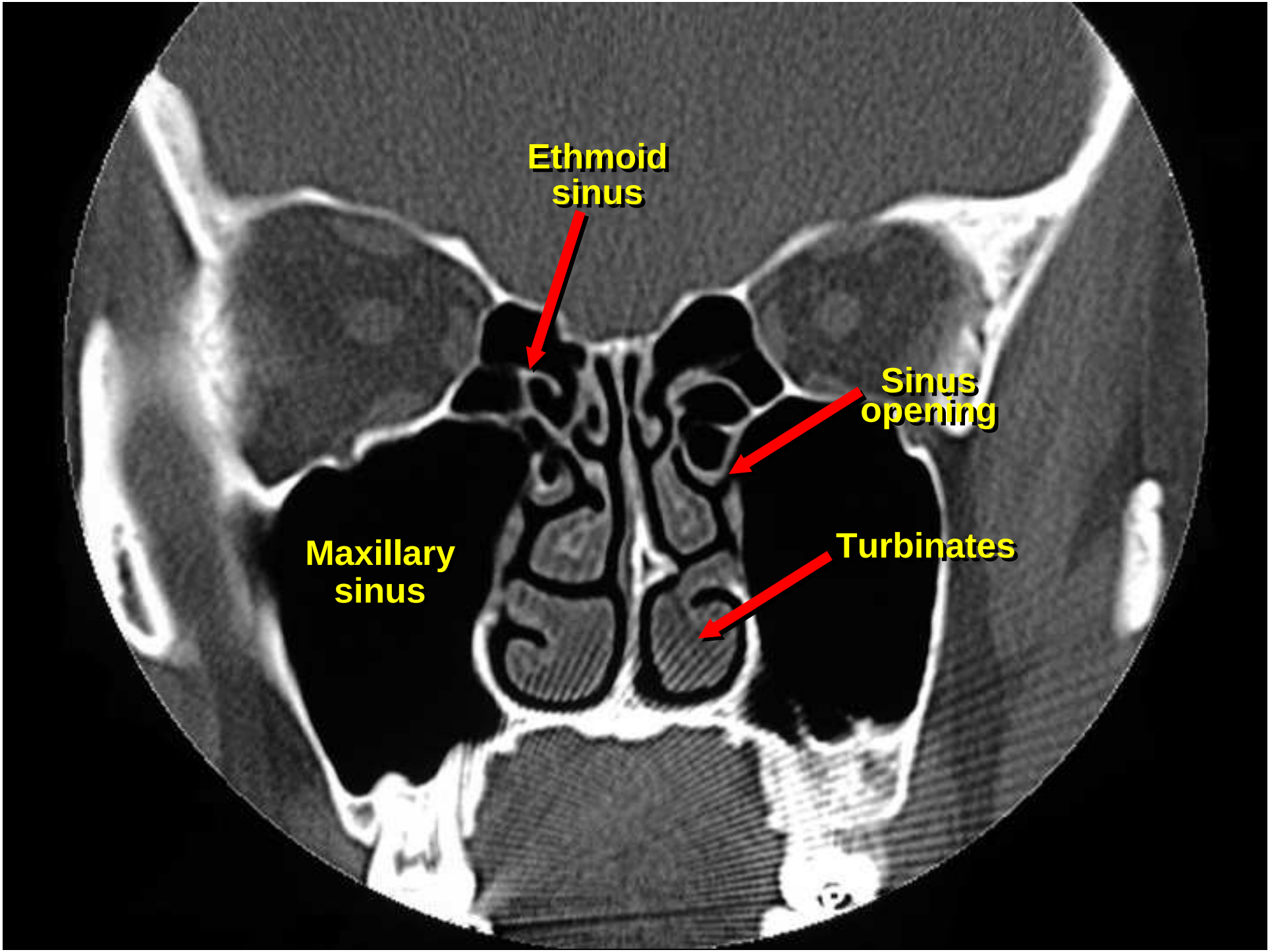
What you will learn today

1. What causes block nose & sinusitis
   (Problem Identification, Prioritization)
2. What happens if they are left untreated.
   (Prevention of Complications)
3. What are the optimal treatment strategies.
   (Action Plans)

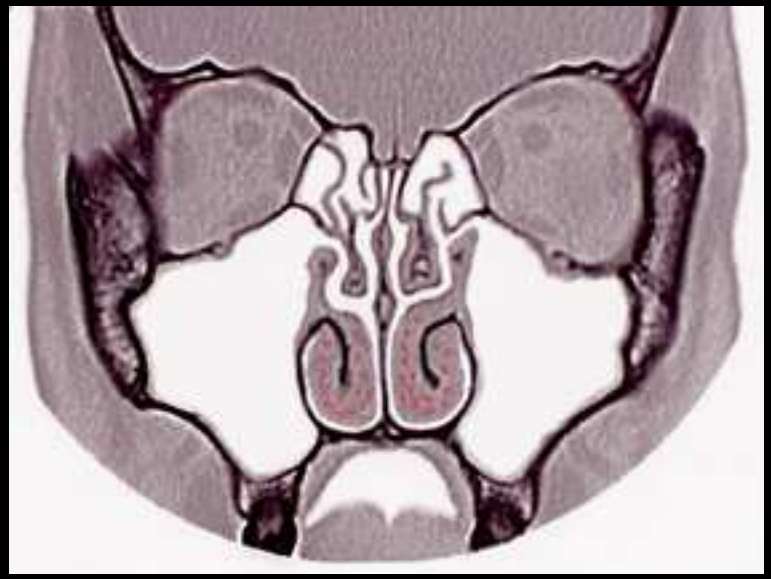
A normal nose



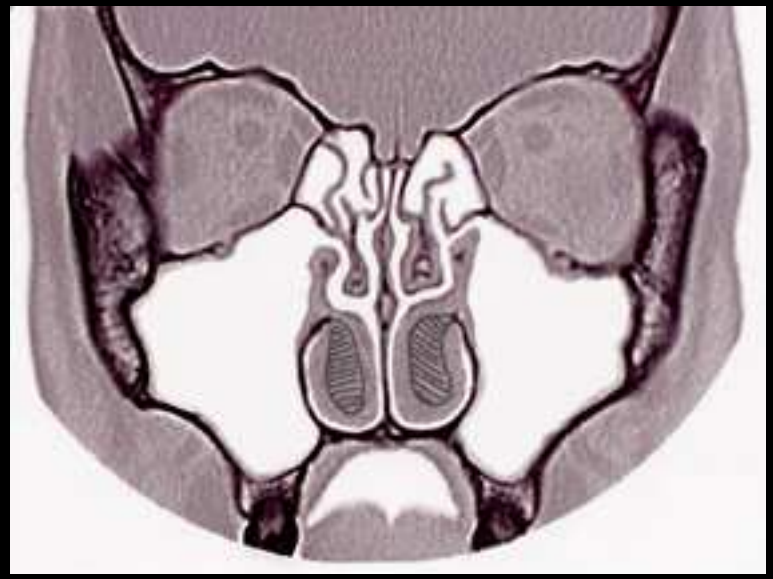
Straight nasal septum
Normal middle & lower turbinates
Unobstructed sinuses
No polyps


Ethmoid sinus
Sinus opening
Maxillary sinus
Turbinates

Enlarged lower turbinates

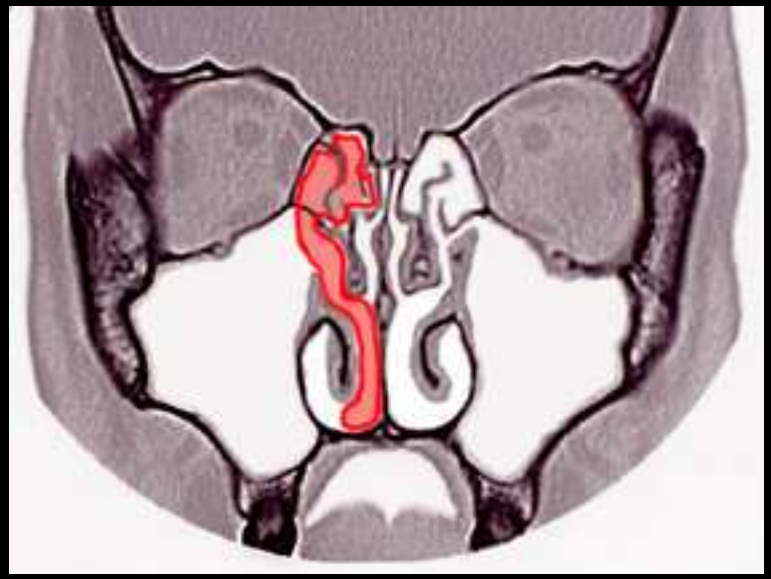


Soft tissue swelling

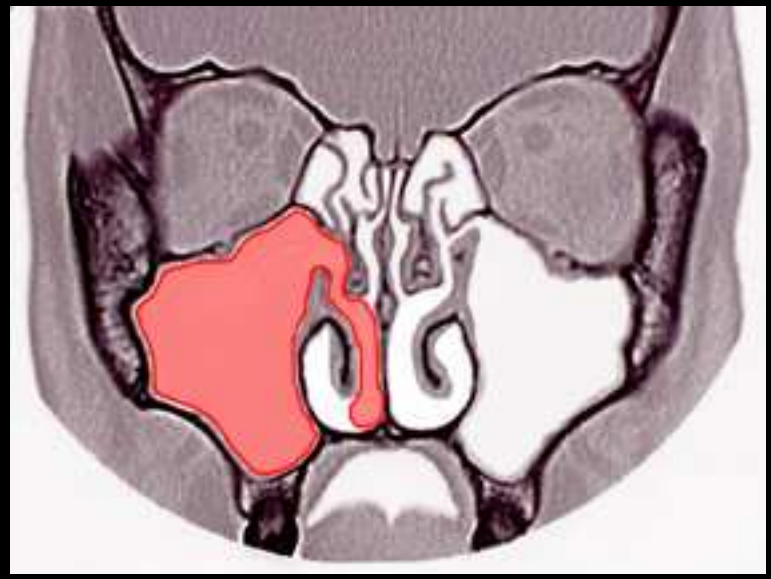


Bony swelling

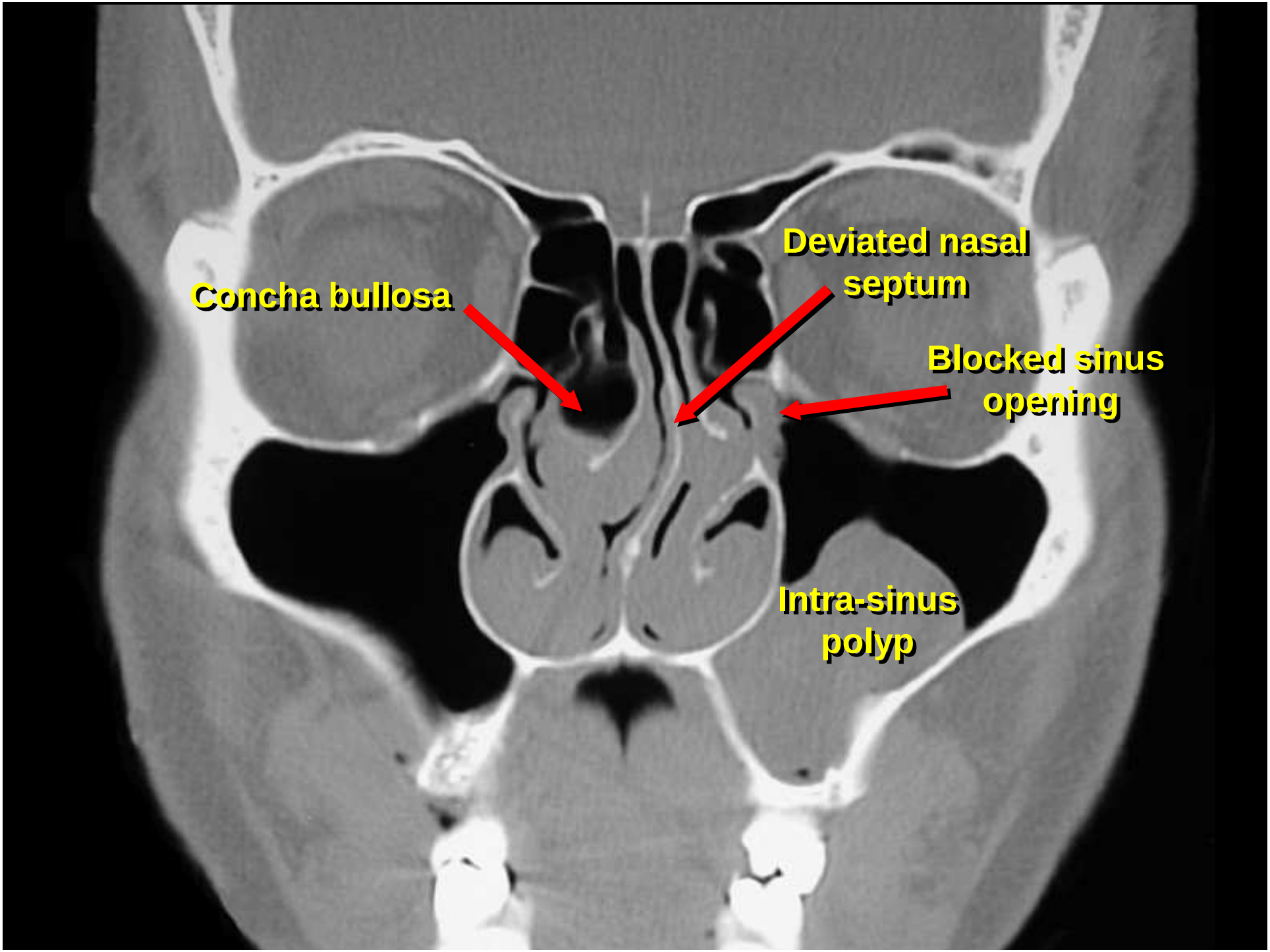
Nasal polyps

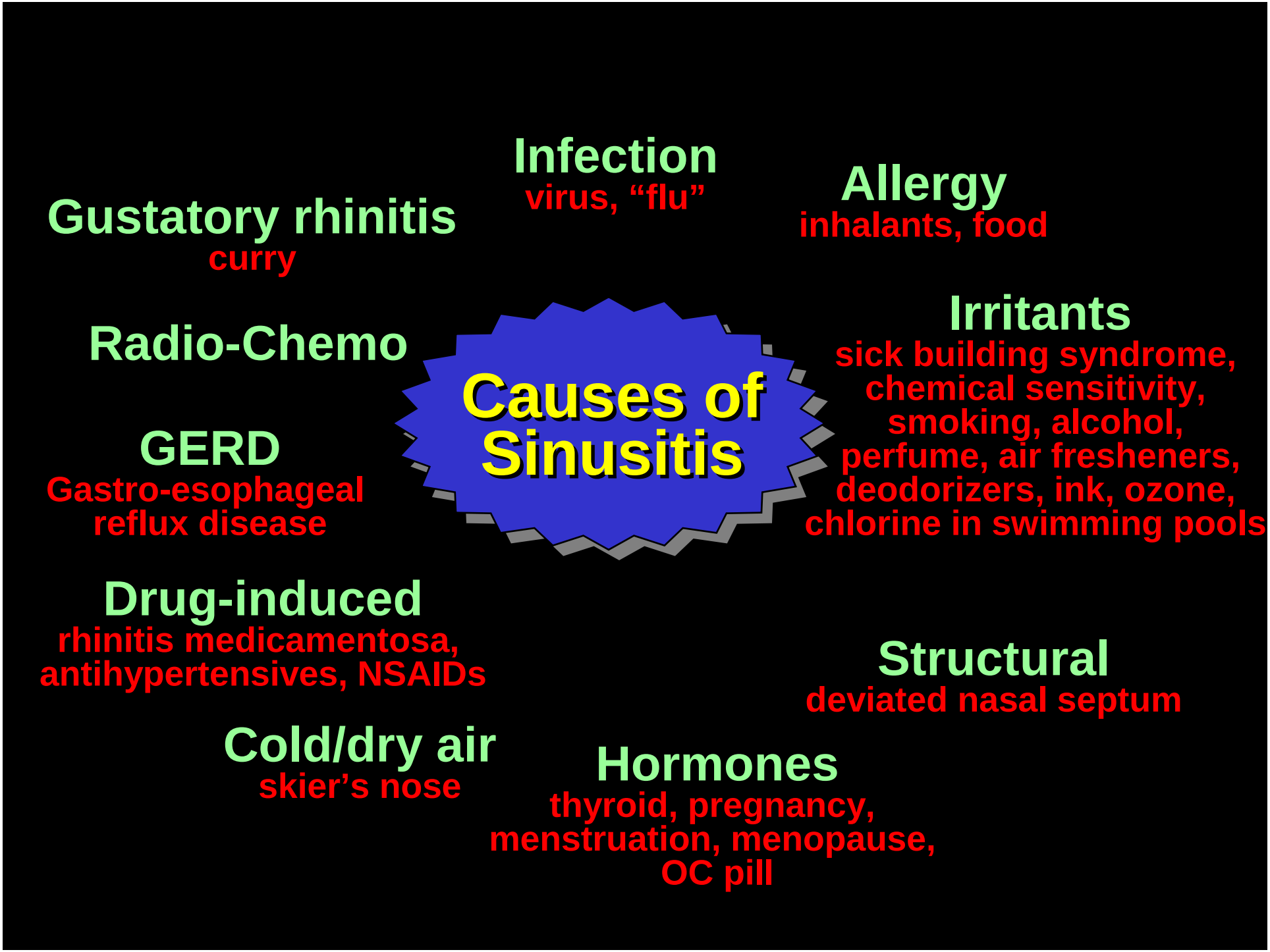


Origin from
ethmoid sinus

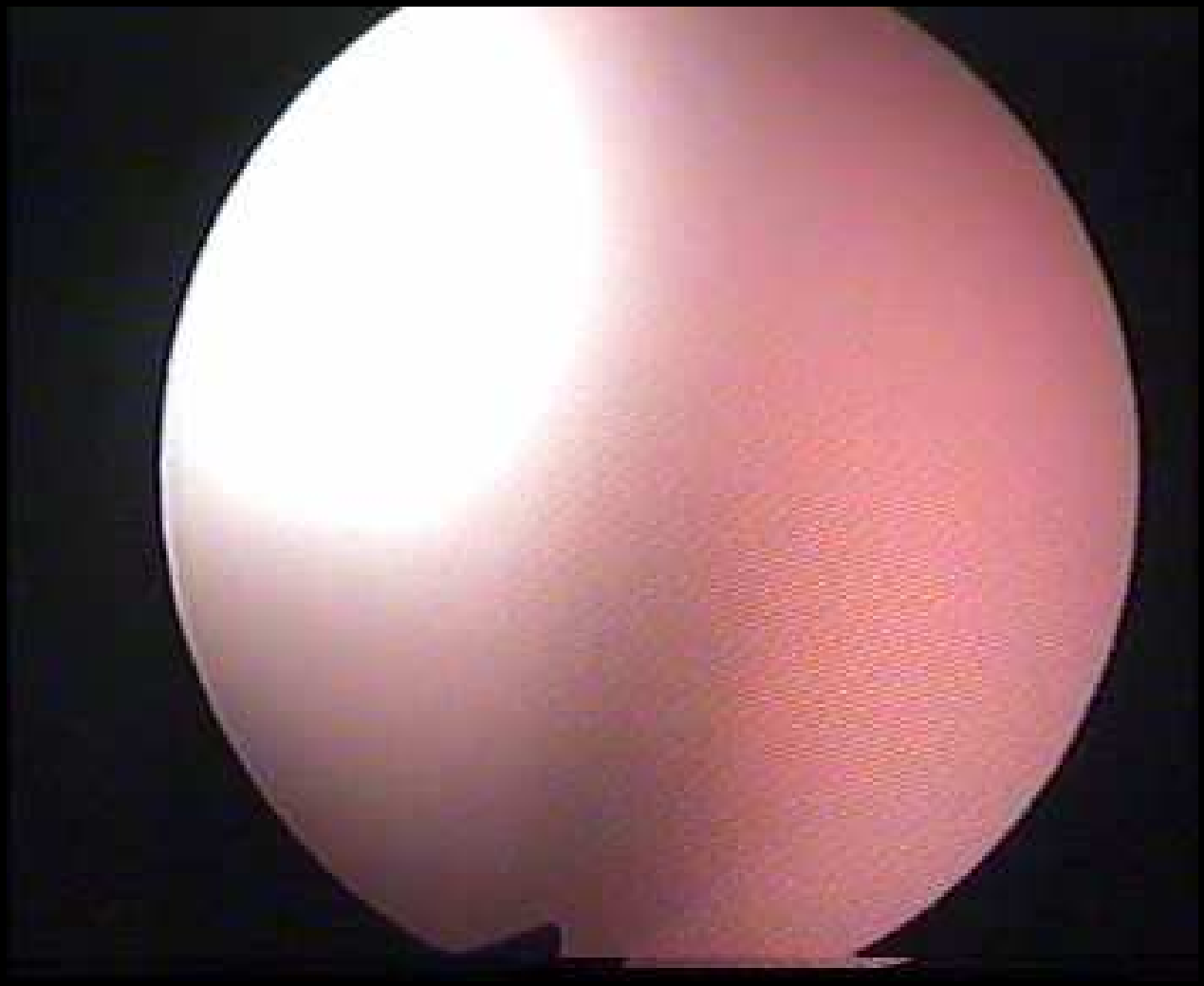


Origin from
maxillary sinus


Concha bullosa
Deviated nasal septum
Blocked sinus opening
Intra-sinus polyp


Causes of Sinusitis
Infection
virus, “flu”
Allergy
inhalants, food
Gustatory rhinitis
curry
Radio-Chemo
Irritants
sick building syndrome, chemical sensitivity, smoking, alcohol, perfume, air fresheners, deodorizers, ink, ozone, chlorine in swimming pools
GERD
Gastro-esophageal reflux disease
Drug-induced
rhinitis medicamentosa, antihypertensives, NSAIDs
Structural
deviated nasal septum
Cold/dry air
skier’s nose
Hormones
thyroid, pregnancy, menstruation, menopause, OC pill

Adeno-tonsil enlargement in children



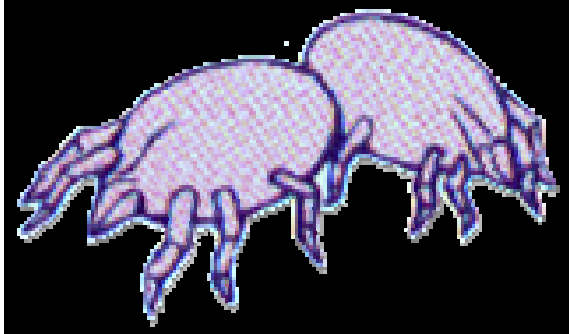
My objective during the evaluative stage is to determine and isolate all the identifiable problem factors that contribute to the sinus problem.

Next, I prioritize, plan, and decide which problems to attack first, and which to tackle later.

Then, I review and monitor progress, and decide if treatment needs to be modified, enhanced or terminated.

Sinusitis

Performance & Productivity



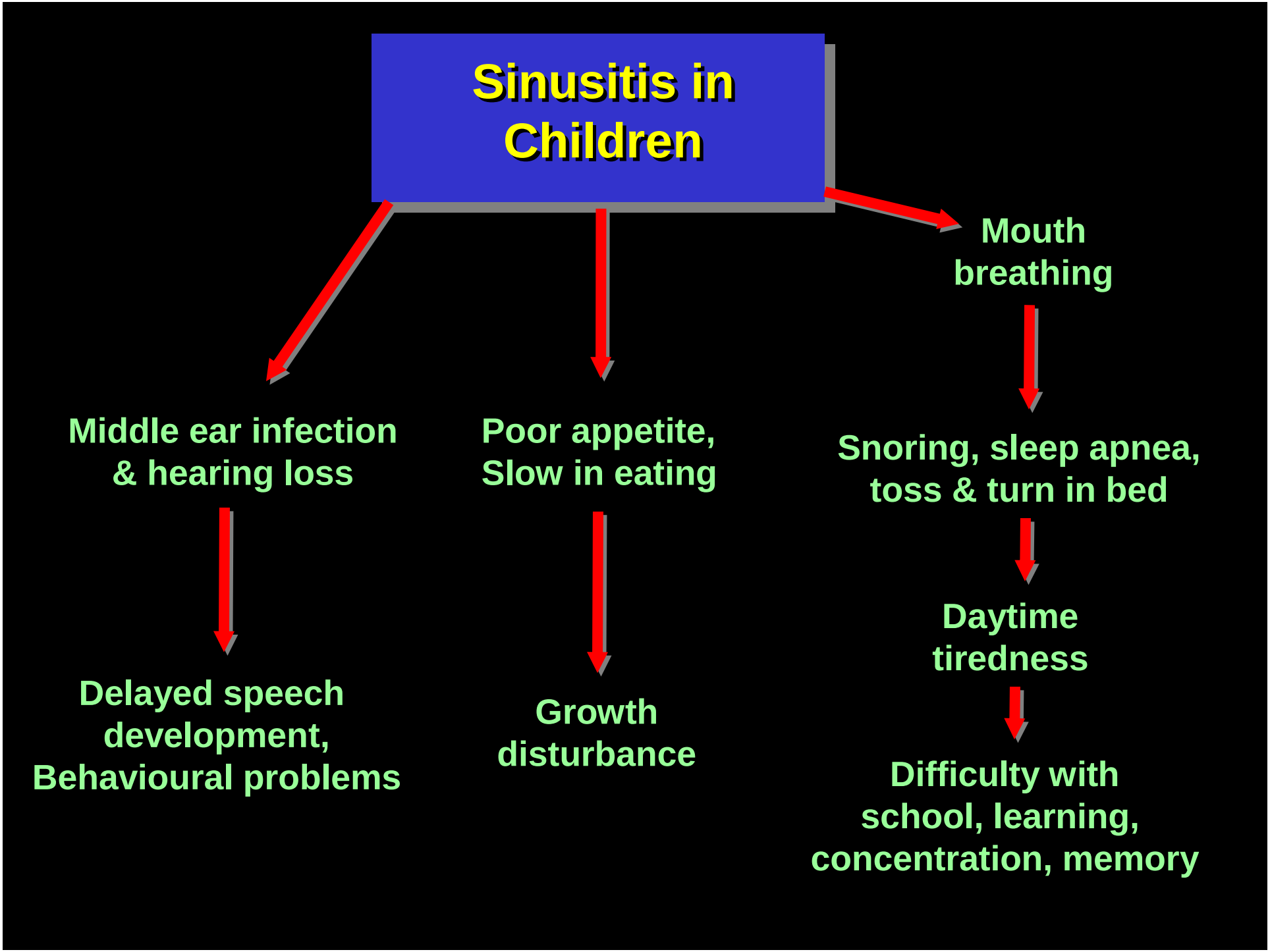
Lethargy, tiredness, lack of energy

Cognitive problems: concentration, slow thinking, memory, attentiveness, creativity, motivation, learning, education, academic achievement.

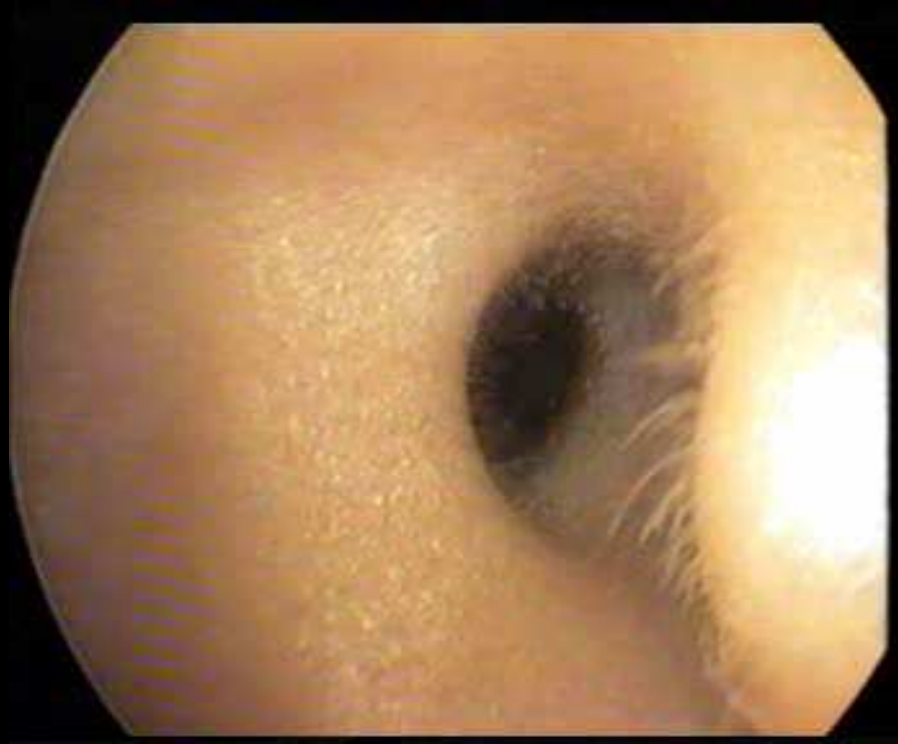
Emotional problems: short-tempered, bad moods, irritable, hostile, depressed.

Social relationships: social embarassment, tissue paper dependence.

Work & Study: singers, actors, teachers, public speakers, preachers, student, newscasters

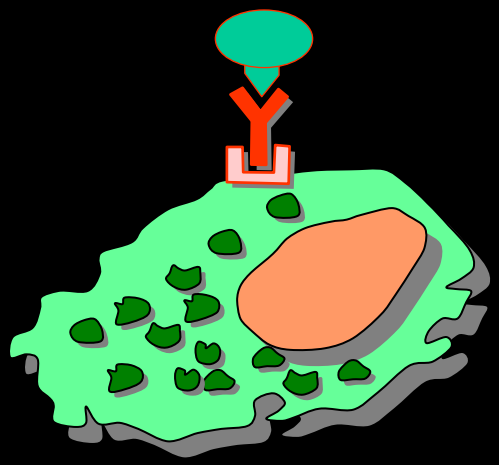

Sinusitis in Children
Middle ear infection & hearing loss
Delayed speech development, Behavioural problems
Poor appetite, Slow in eating
Growth disturbance
Mouth breathing
Snoring, sleep apnea, toss & turn in bed
Daytime tiredness
Difficulty with school, learning, concentration, memory

Middle Ear Effusion



Cough Variant Rhinitis

Why Treat Sinusitis?



Reduce physical discomfort

Reduce complications:
sinusitis, ear infection, throat infection, worsening of asthma

Improve sleep

Improve performance & productivity

Enhance control of asthma

Types of Nose & Sinus Operations

1. **Nasal Septum Procedures**: to straighten a crooked nasal septum.
   a) Septoplasty
   b) Manipulation of nasal septum

2. **Inferior Turbinate Procedures**: to reduce the size of the inferior turbinates.
   a) Submucosal vacuum turbinotomy
   b) Radiofrequency thermotherapy turbinotomy
   c) Surgical reduction of inferior turbinate
   d) Turbinate lateralization procedure
   e) Volume reduction mucosa preserving procedure

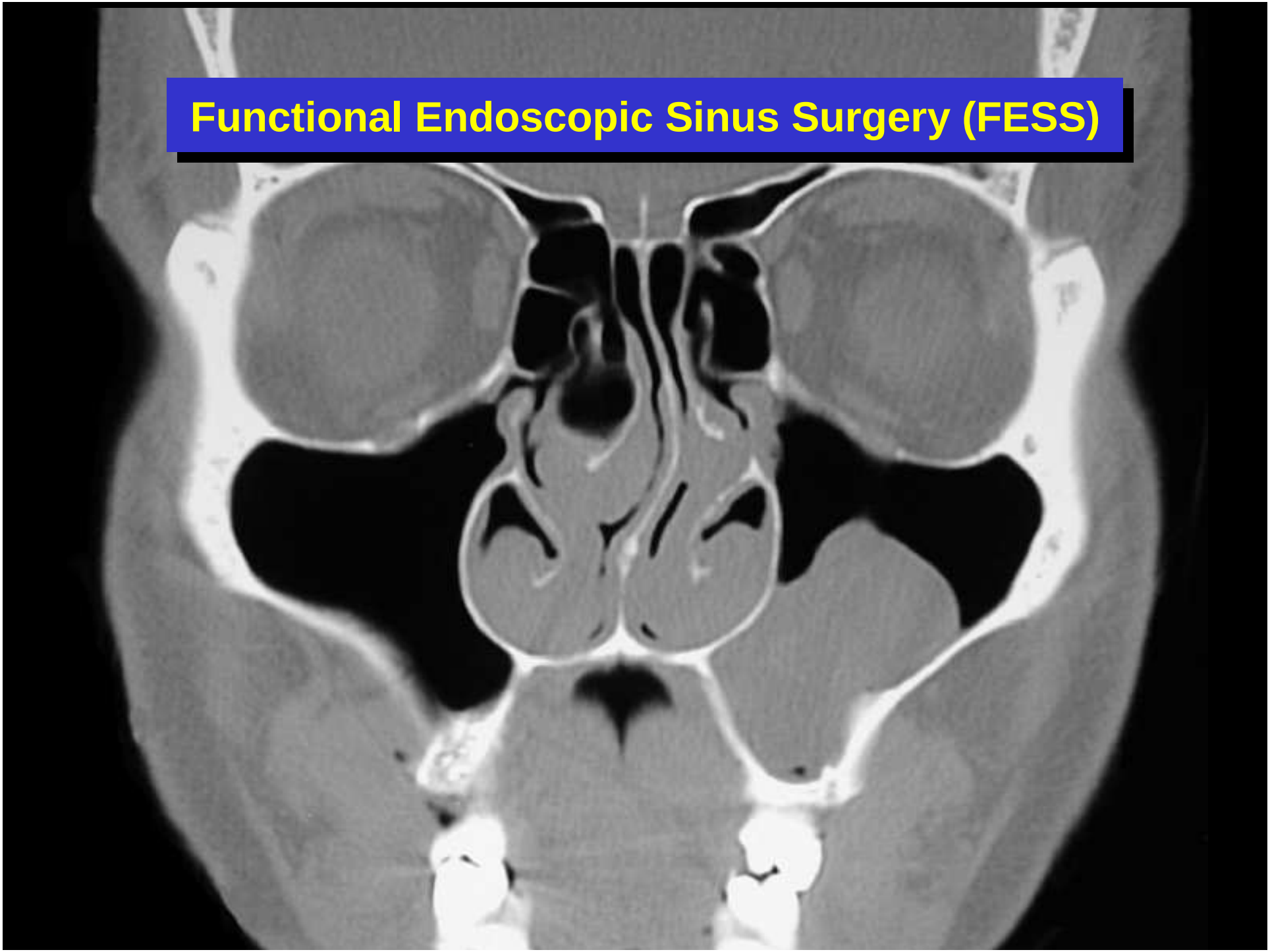
3. **Middle Turbinate Procedures**: to reduce the size of the middle turbinates.
   a) Sagittal splitting of concha bullosa
   b) Vacuum middle turbinectomy

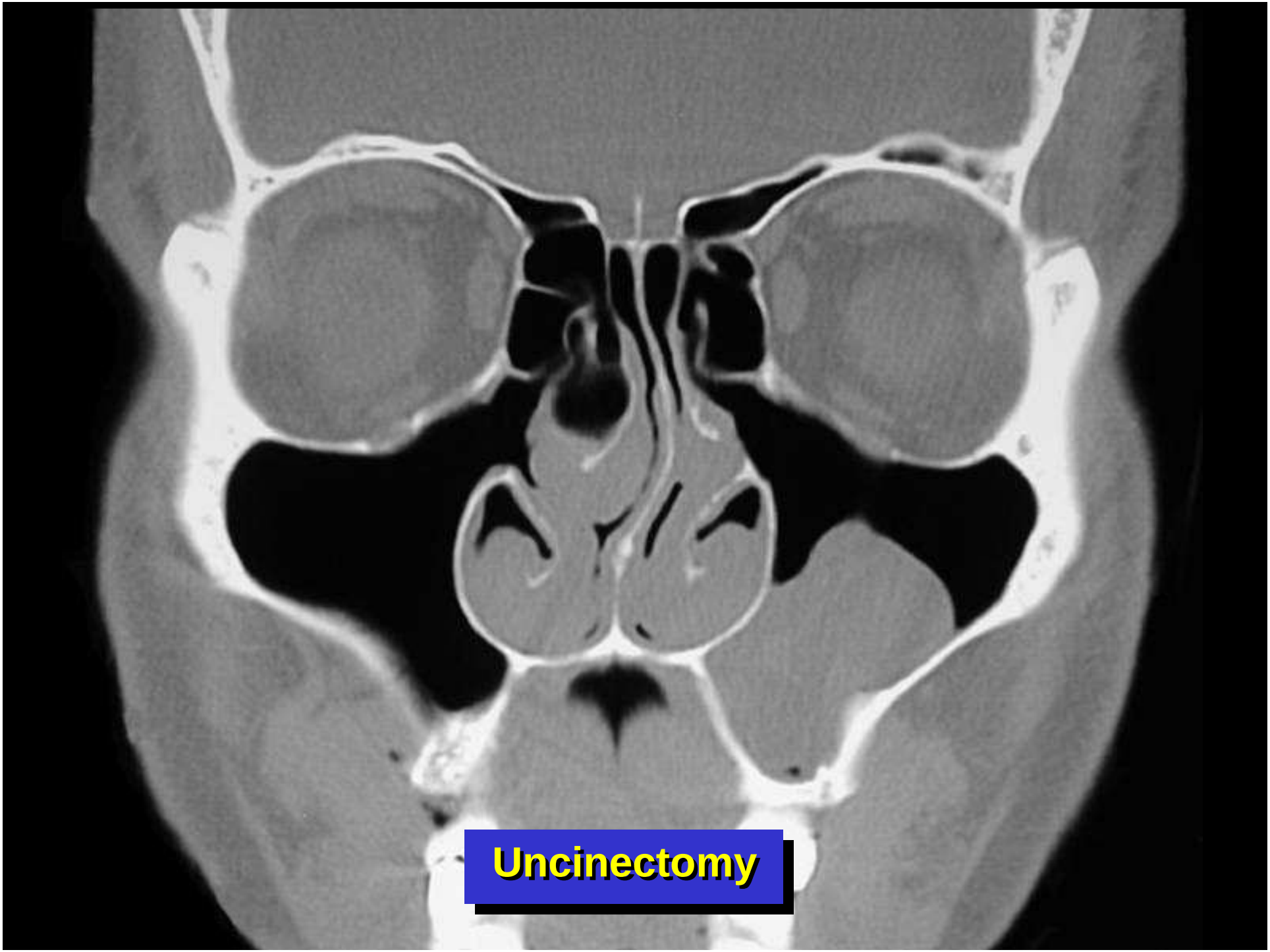
Types of Nose & Sinus Operations

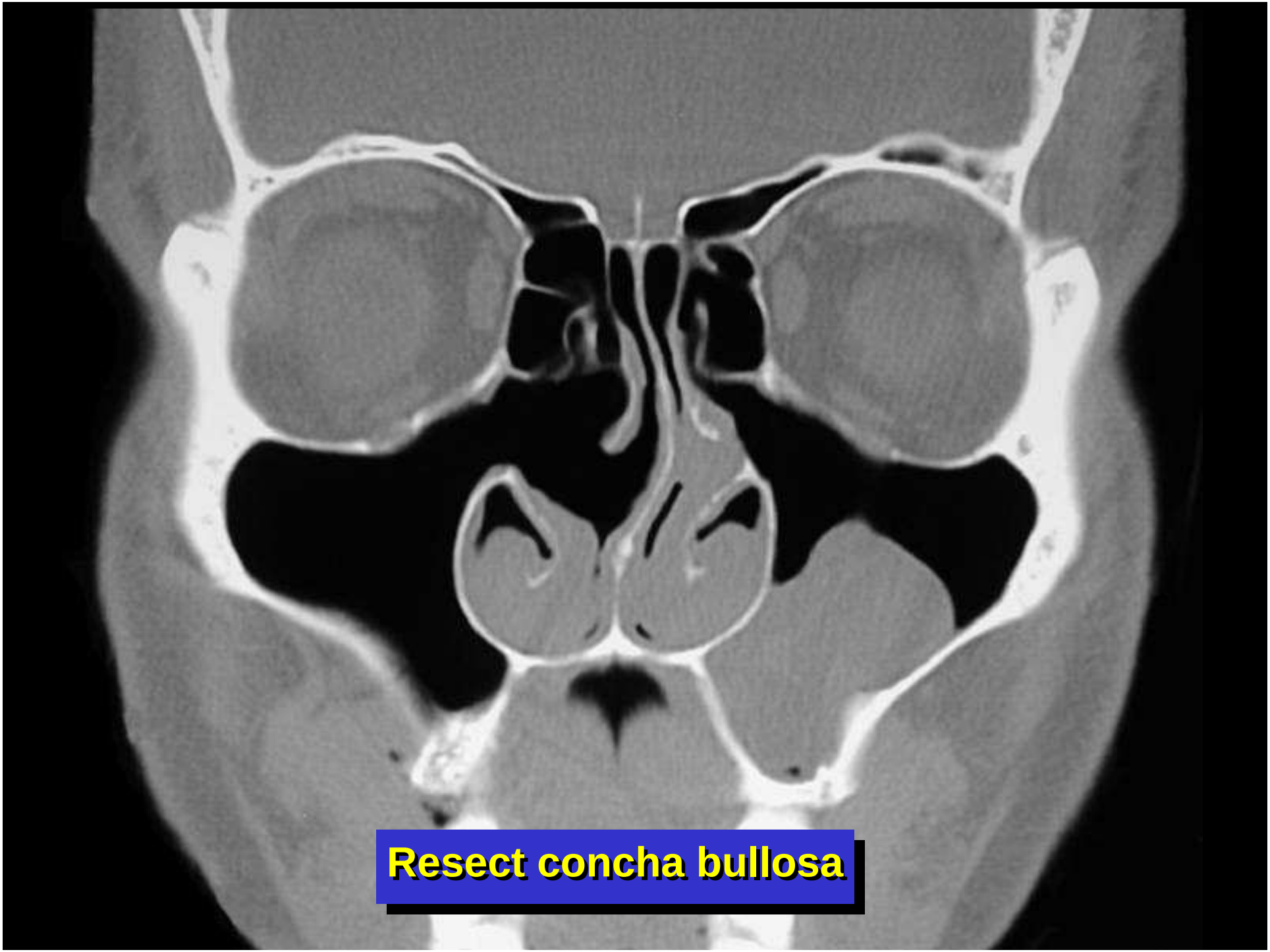
4. **Sinus Procedures**: to open up the sinus openings to allow adequate drainage of the sinus openings.
   a) Functional Endoscopic Surgery Surgery (FESS)
   b) Computer-aided Sinus Surgery
   c) Balloon Sinuplasty
   d) Endoscopic Sinus Washout

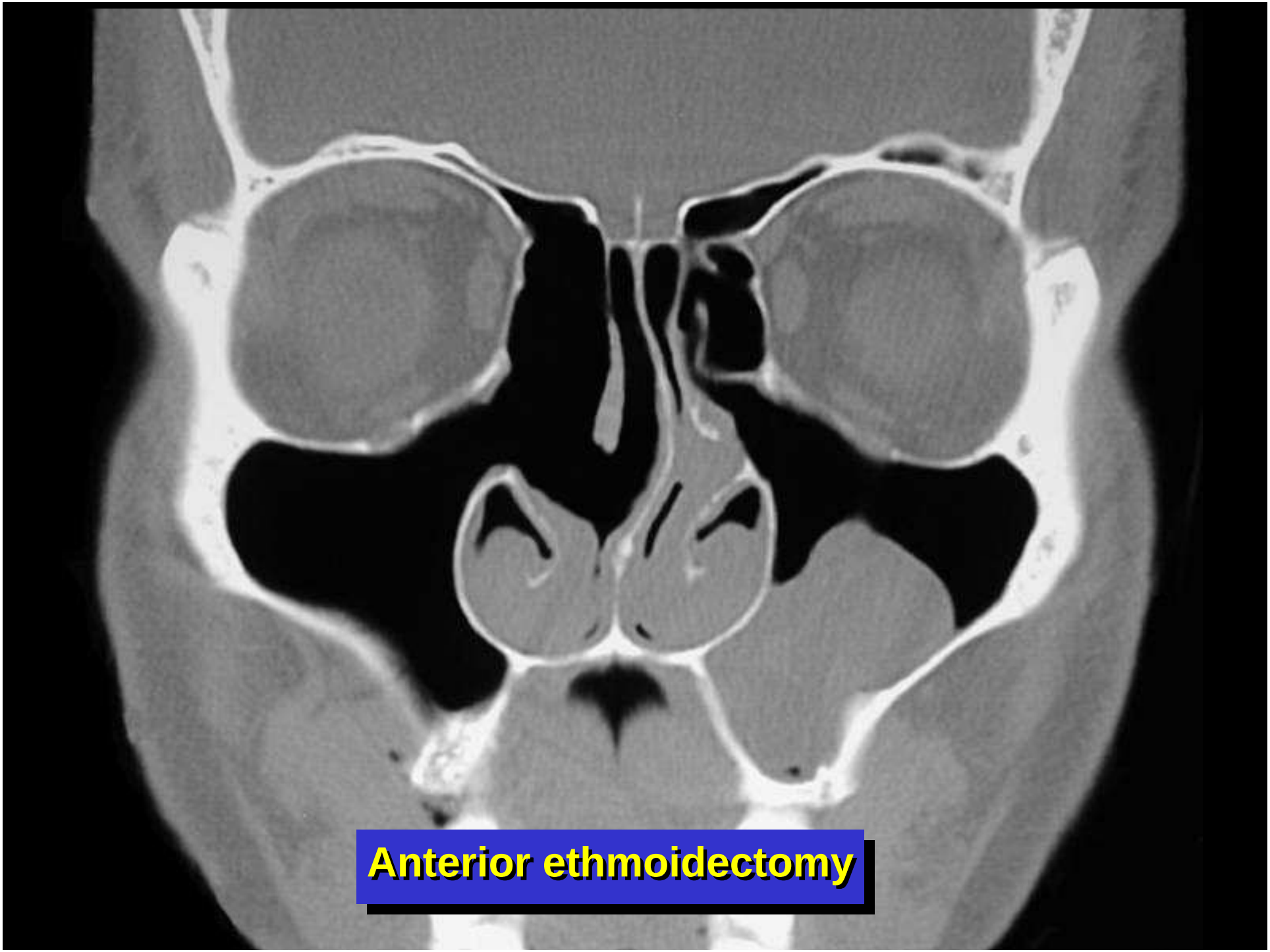
5. **Adenoid Procedures**:
   a) Adenoidectomy
   b) PITA (Powered Intracapsular Tonsillectomy & Adenoidectomy)

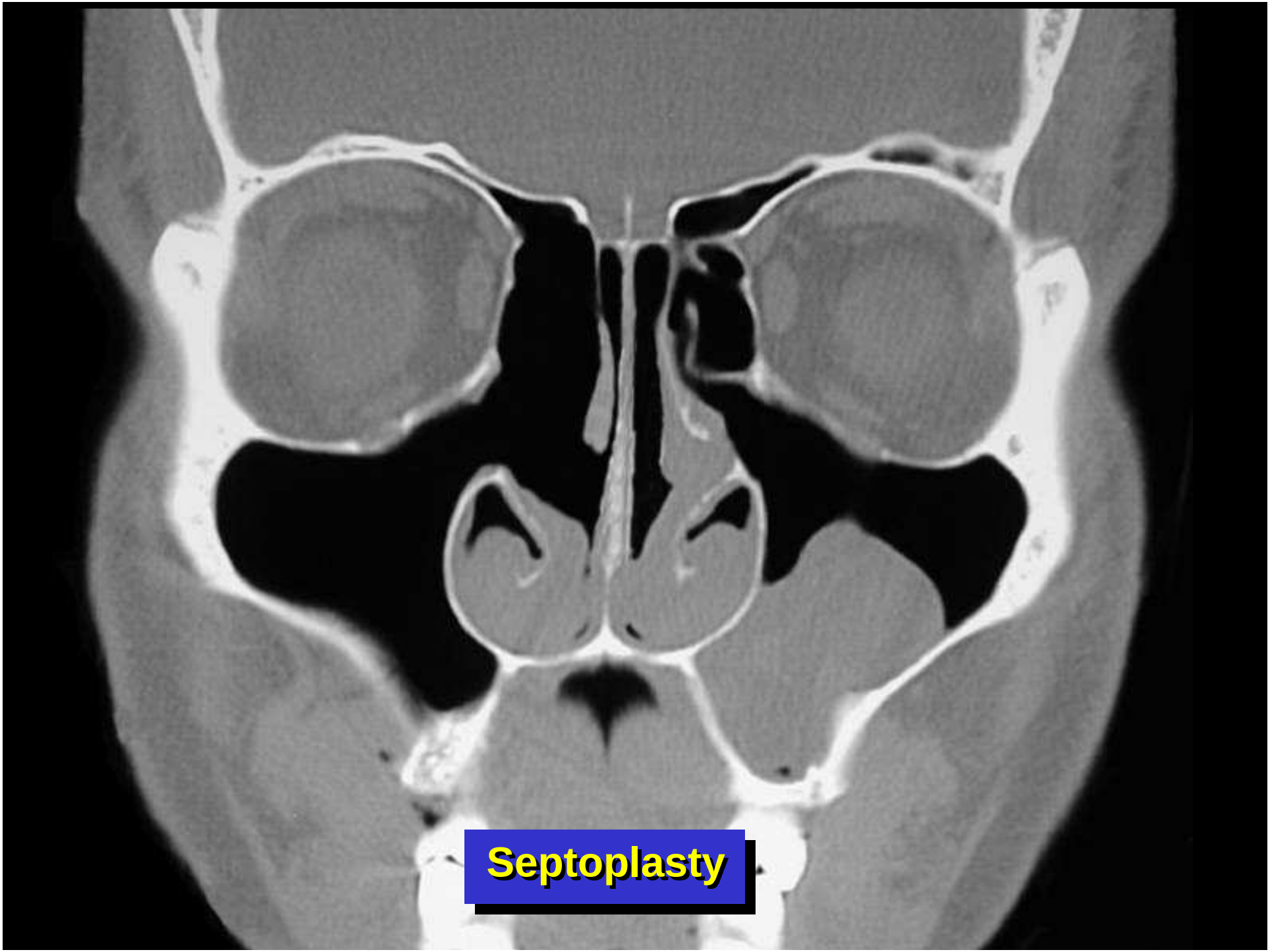
Functional Endoscopic Sinus Surgery (FESS)

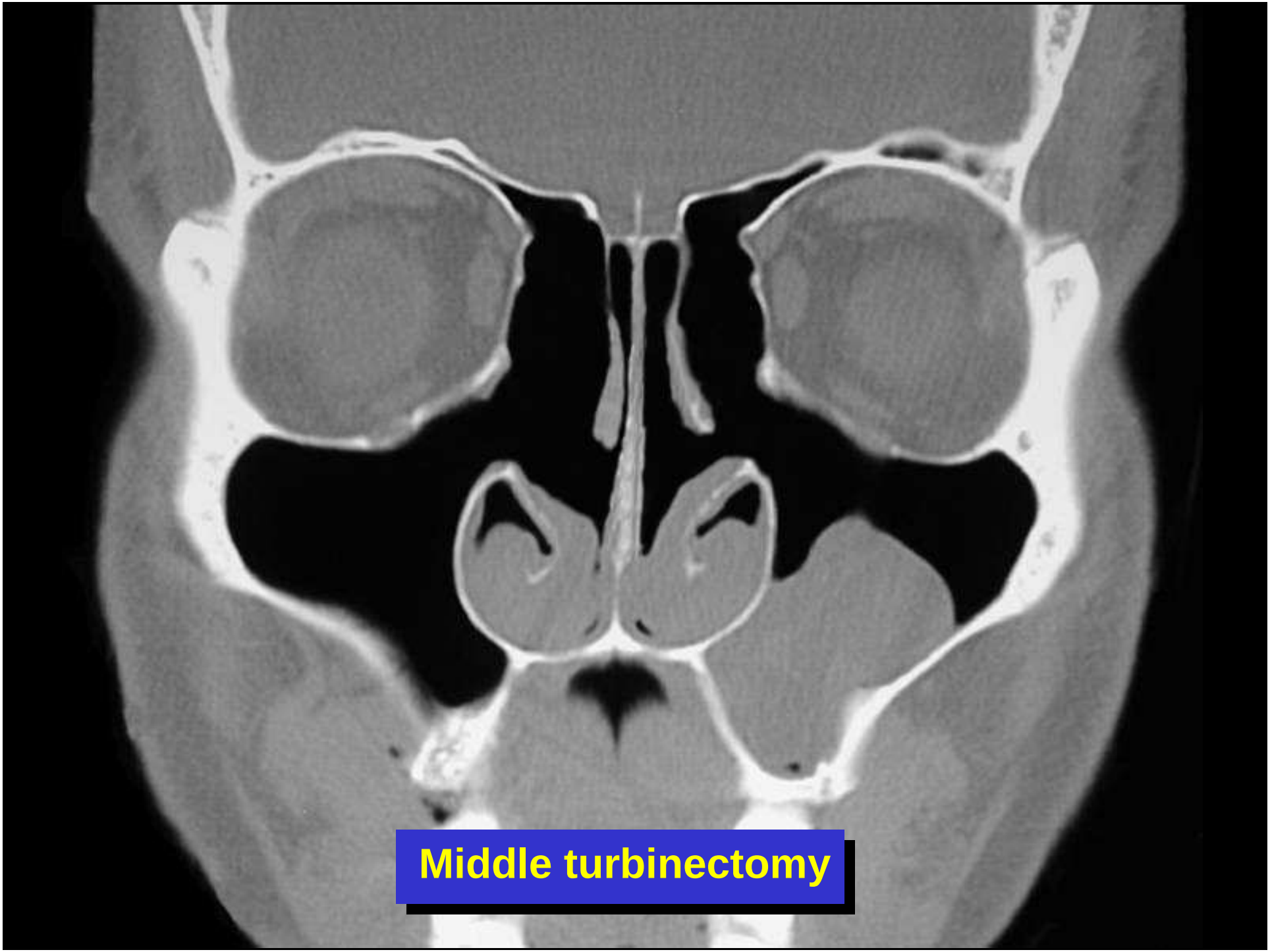


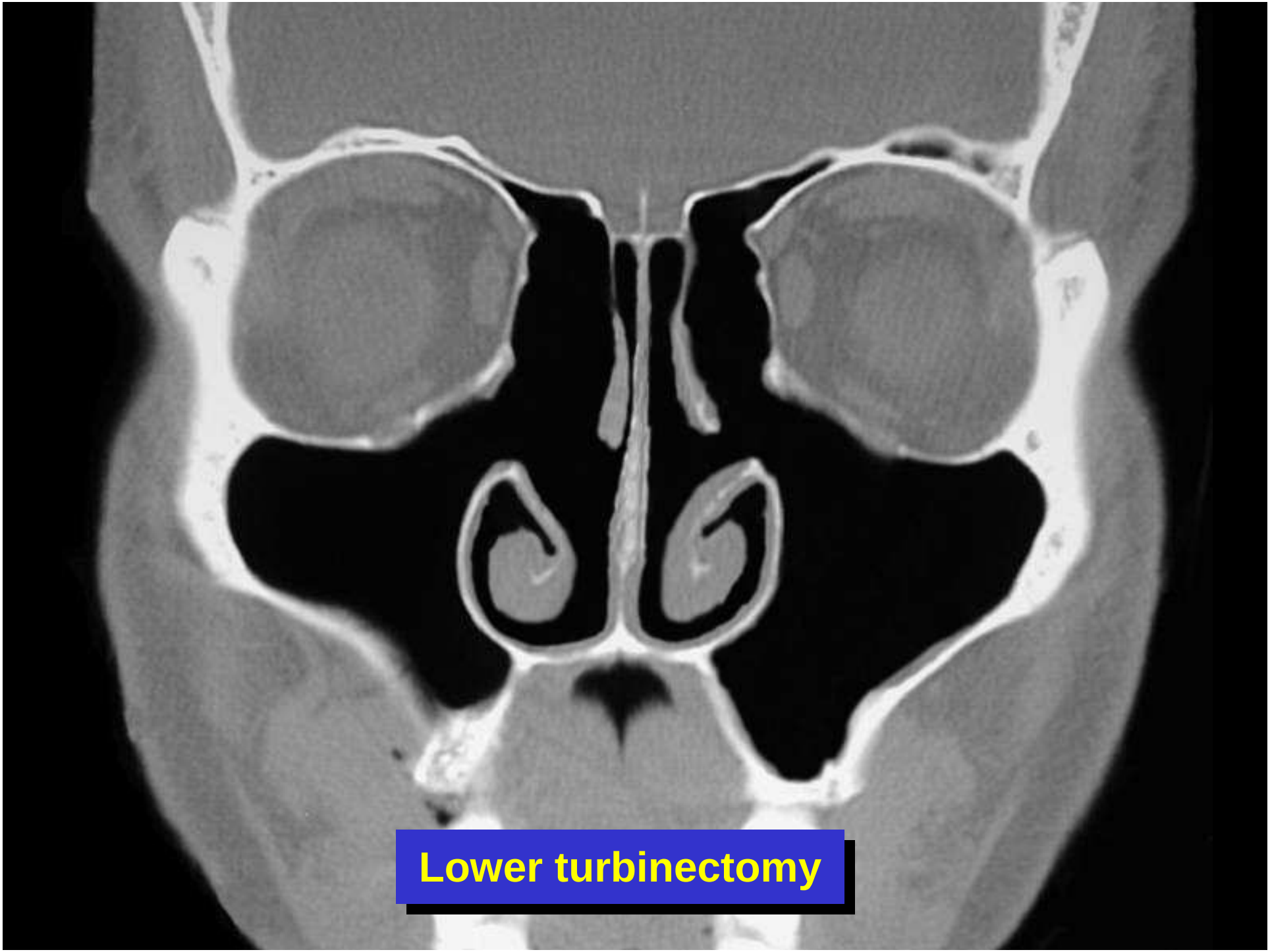

Uncinectomy


Resect concha bullosa

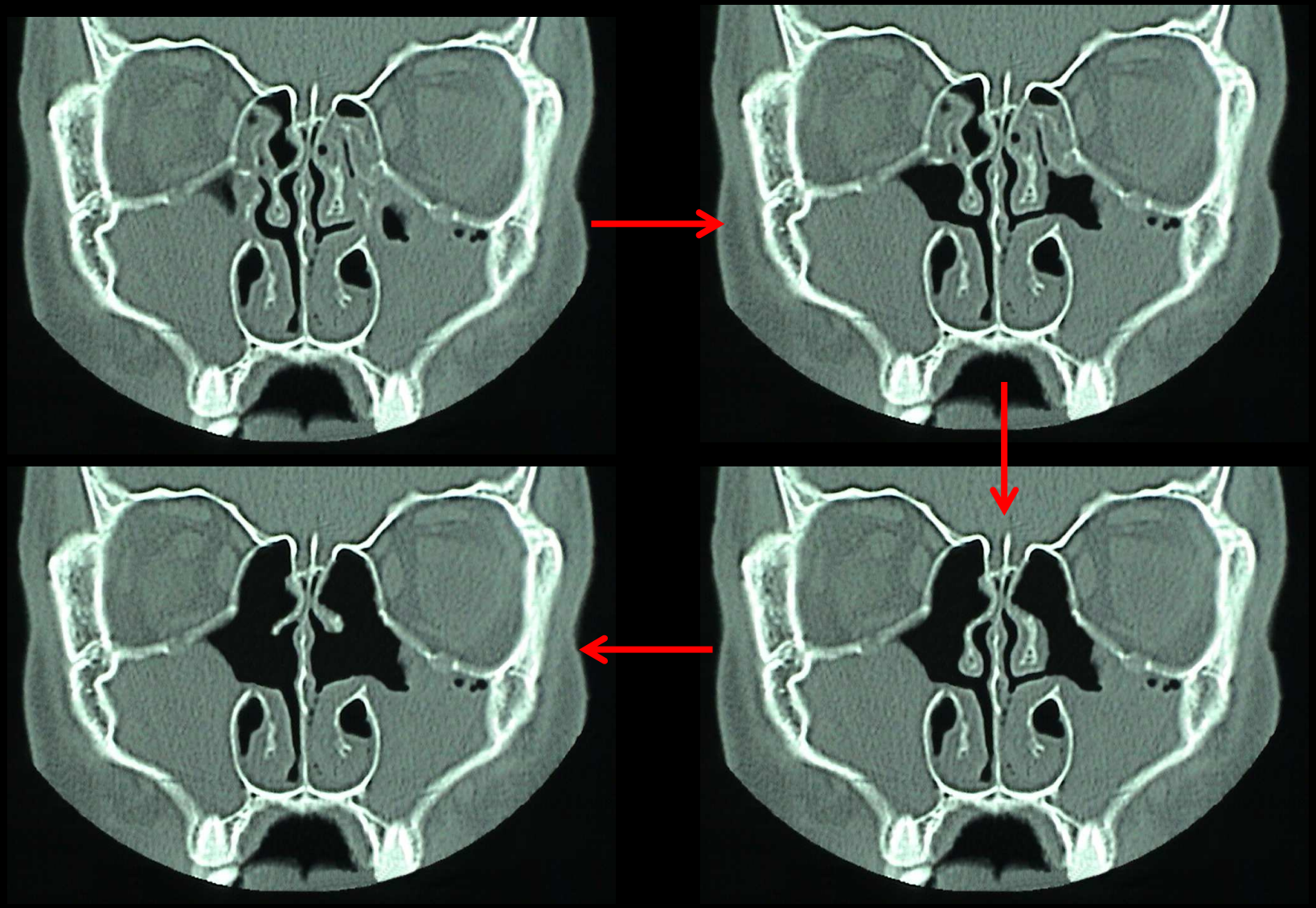

Anterior ethmoidectomy


Septoplasty


Middle turbinectomy


Lower turbinectomy

FESS



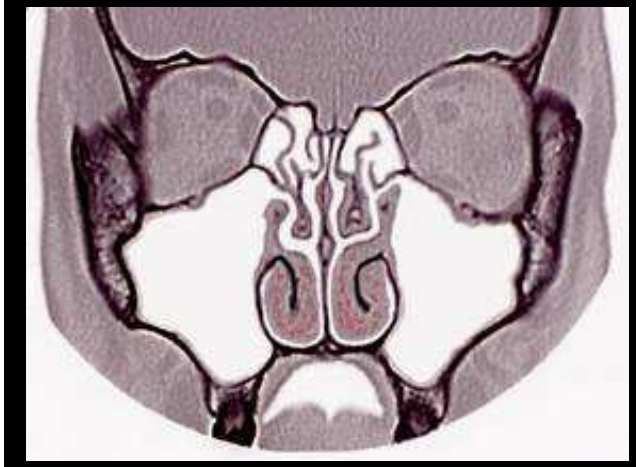
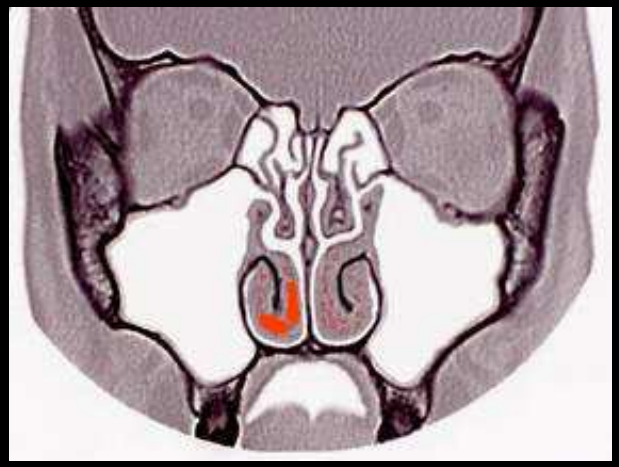
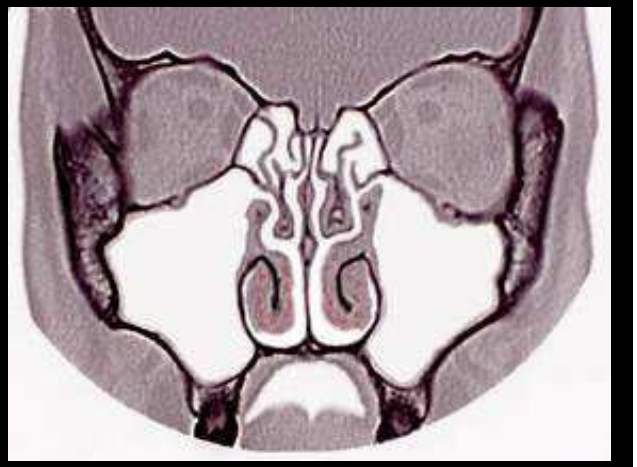
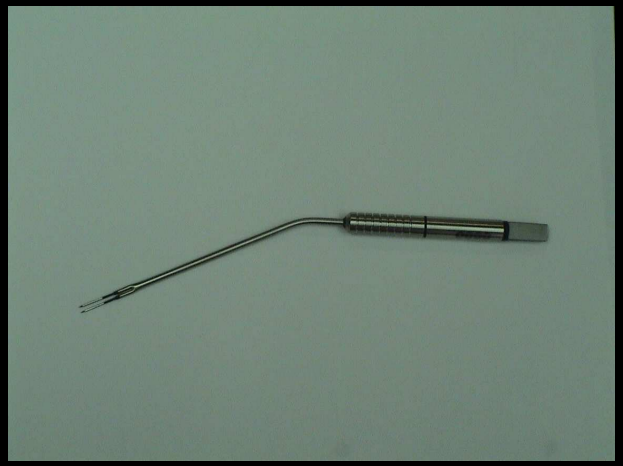
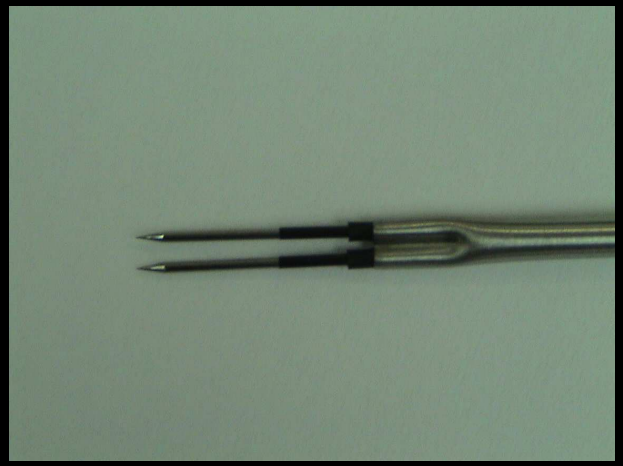
FESS

Concha bullosa resection

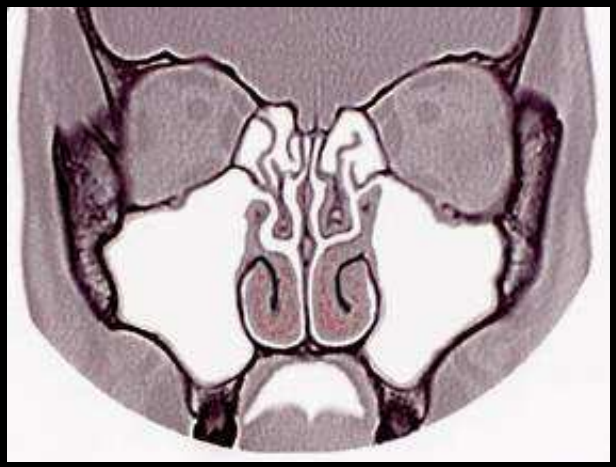
Microdebrider Surgery

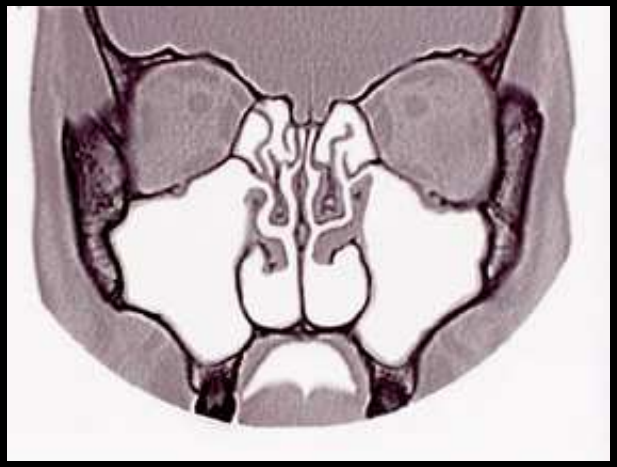
Radiofrequency bipolar application

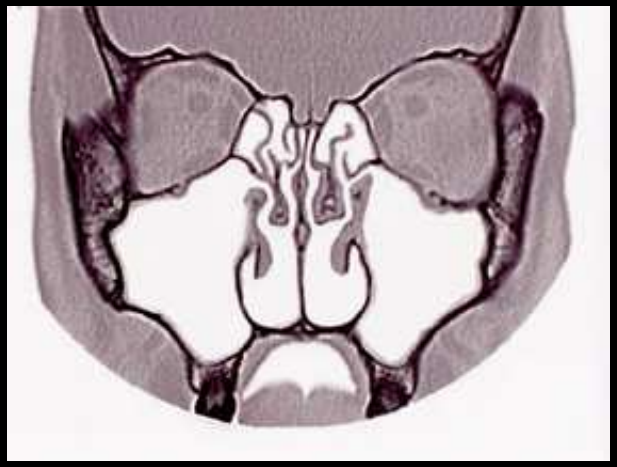
Temperature of 80ºC. Tissue coagulation. No charring.
Tissue reduction by apoptosis (programmed cell death)

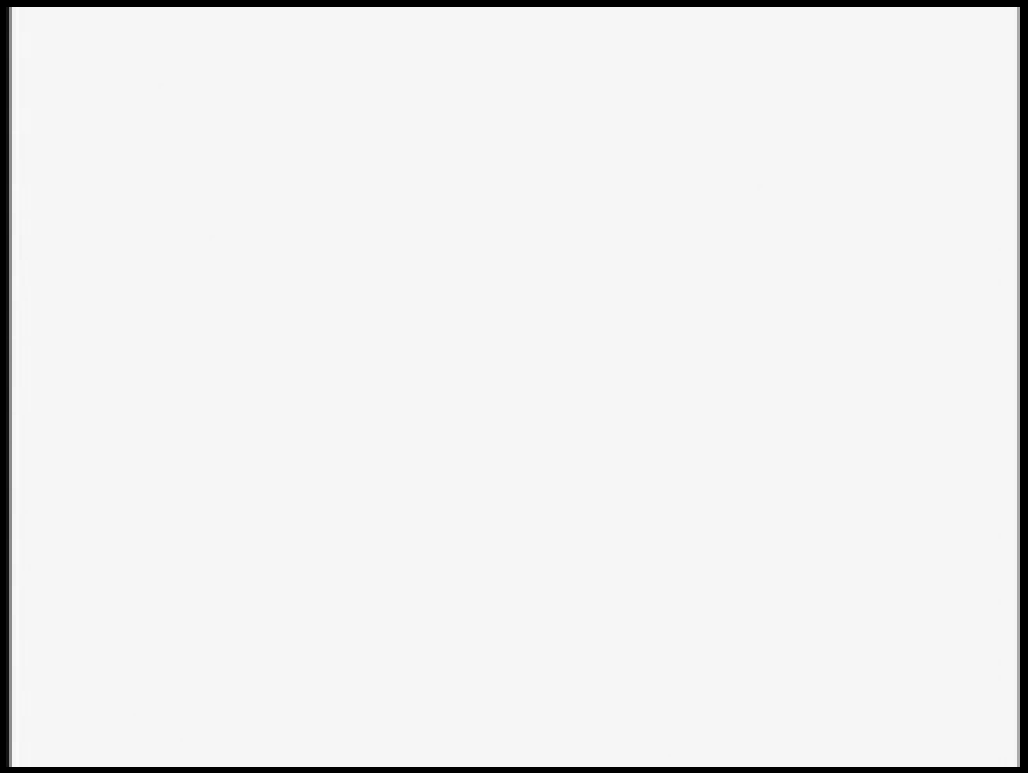
Turbinate Reduction



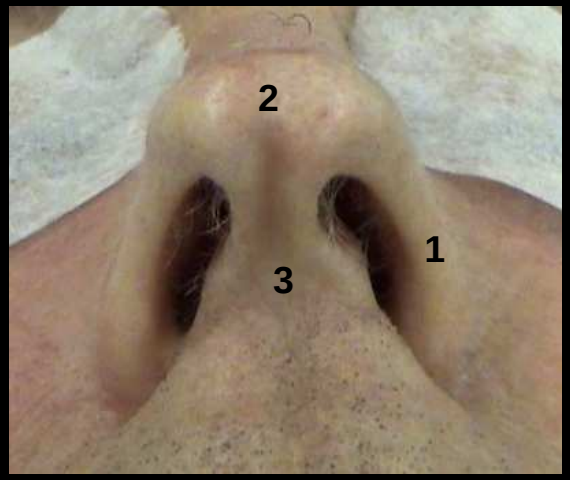


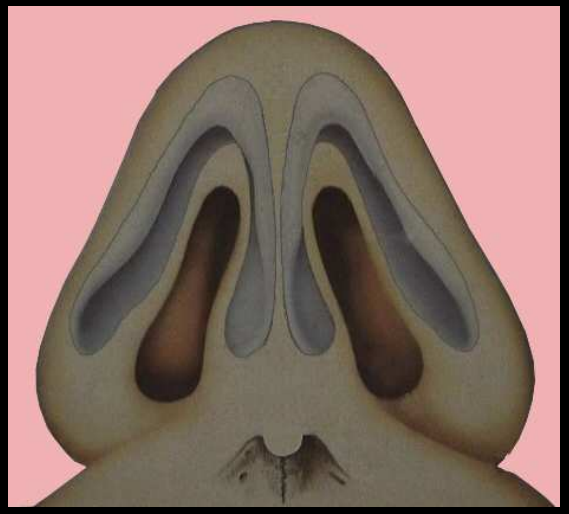


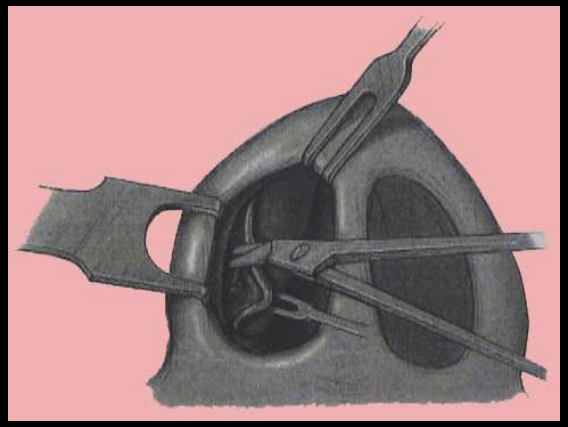
Submucosal soft tissue microdebrider turbinate reduction procedure

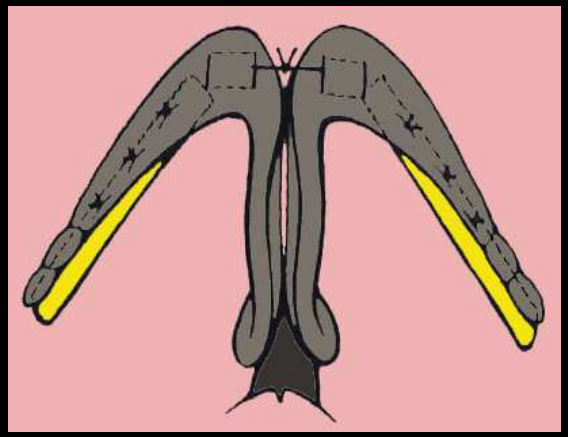


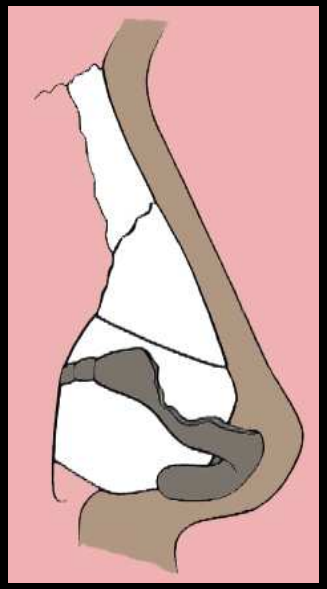
Block nose due to Alar collapse

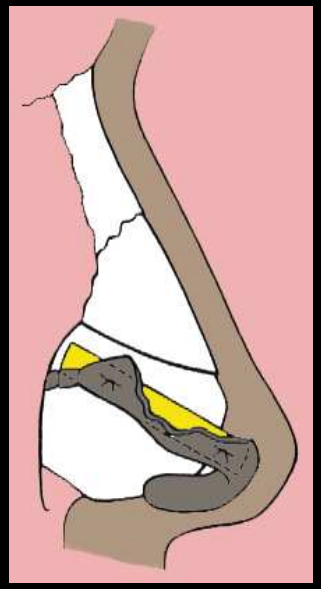












Does Adenotonsillectomy Affect the Course of Bronchial Asthma and Nasal Allergy?

Saito H et al. Acta Otolaryngol (Stokh) 1996;Suppl 523:212-15

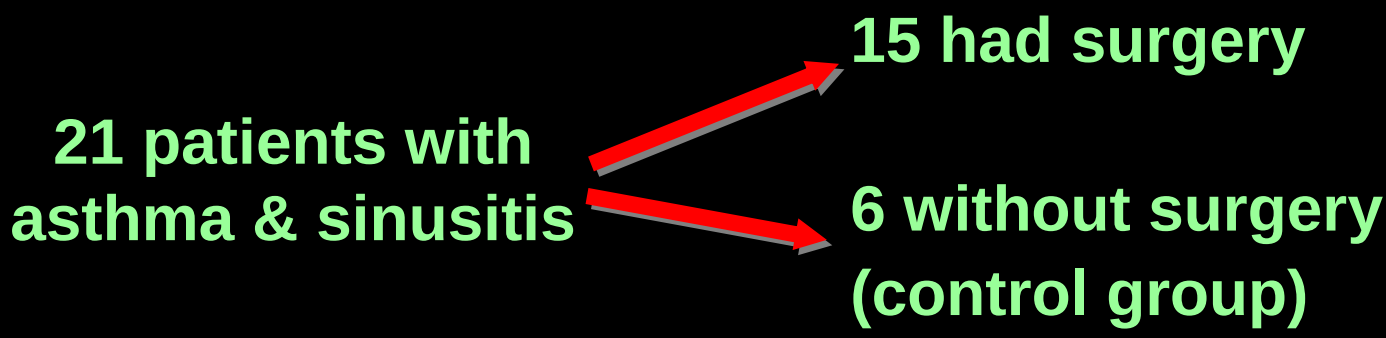
Adenotonsillectomy
in 25 asthmatic patients

Findings:

1. 88% had improved asthmatic symptoms.
2. 60% were able to get off all asthma medications.
3. 28% needed less asthmatic medications.

Endoscopic sinus surgery improves pulmonary function in patients with asthma associated with chronic sinusitis

Ikeda K et al. Ann Otol Rhinol Laryngol 1999;108:355-9



Findings:

1. Improved peak expiratory flow rate (surgery patients).
2. 7/15 had reduced need for steroids.
3. No change in those without surgery.

Long-term impact of functional endoscopic sinus surgery on asthma

Senior BA. Otolaryngol Head Neck Surg1999;121:66-8

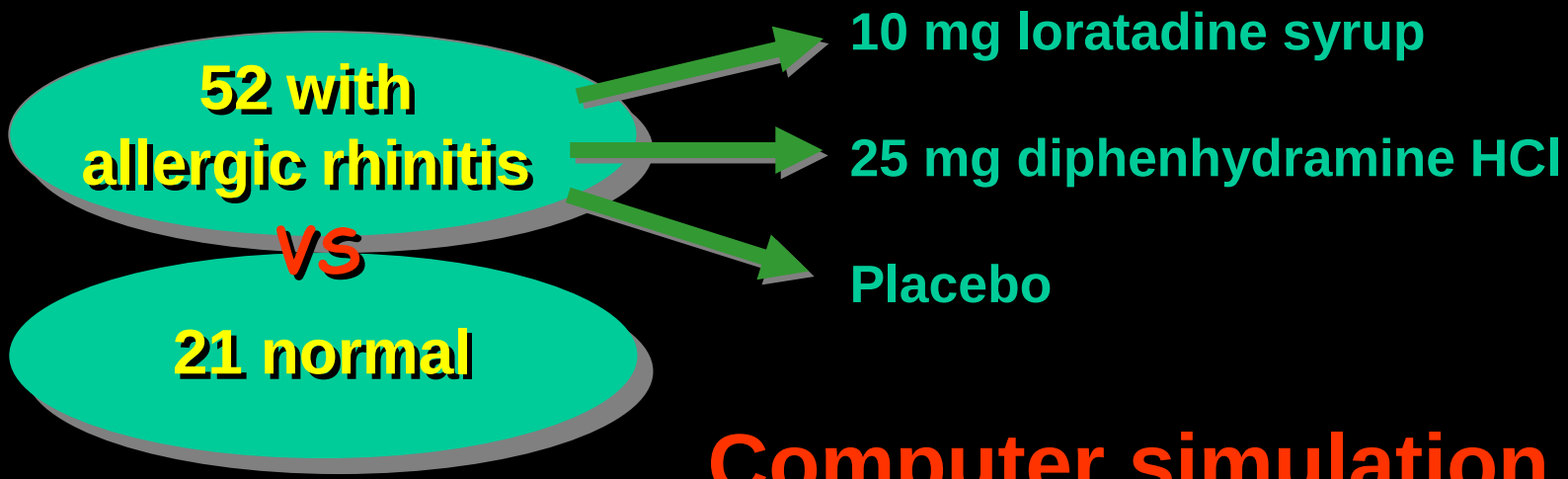
30 patients with
asthma & sinusitis

Findings:

1. 90% felt improvement in asthma.
2. 74% had fewer asthma attacks.
3. 50% needed less inhaler usage.
4. 60% needed less oral steroids.

Seasonal allergic rhinitis and antihistamine effects on children's learning.

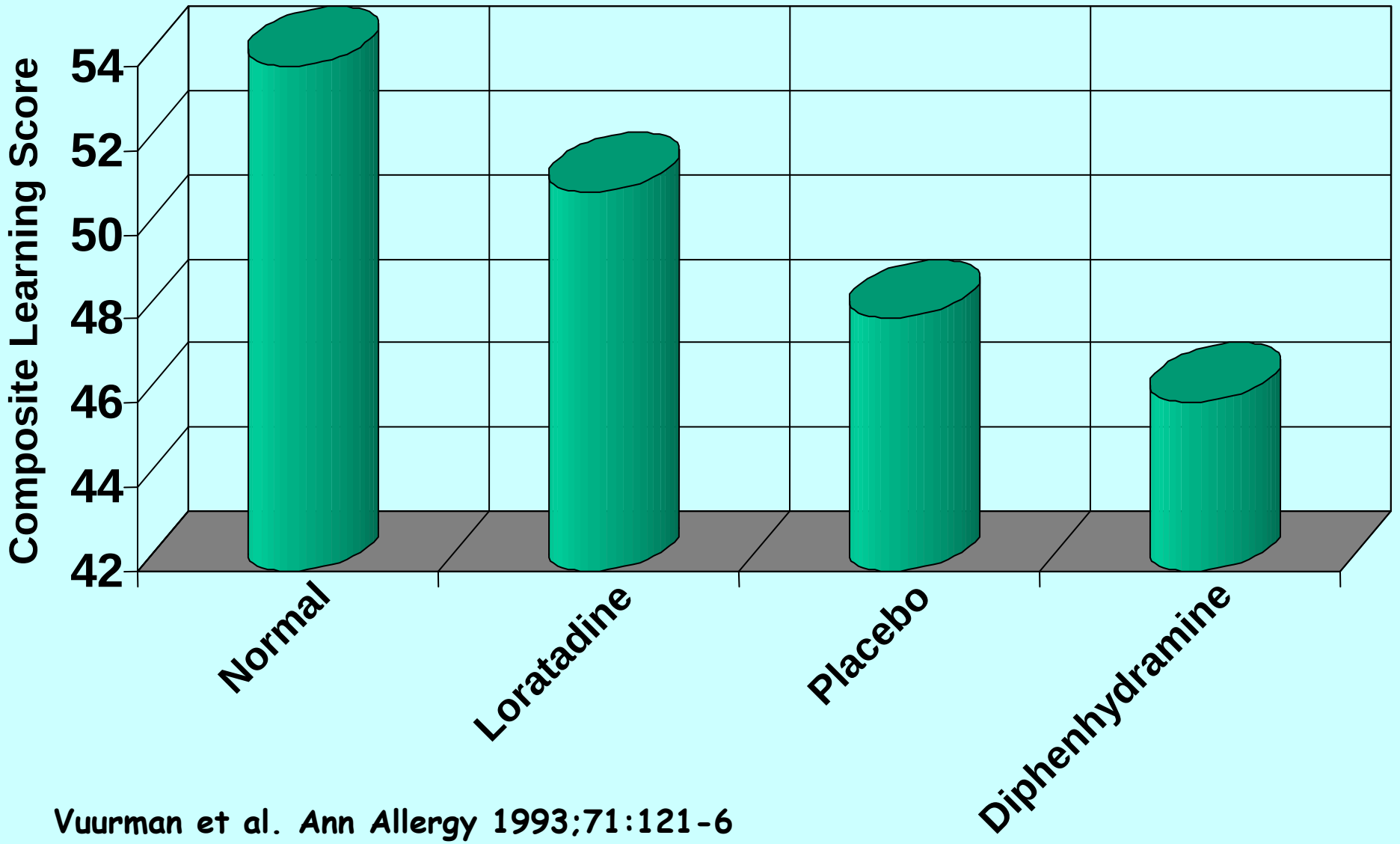
Vuurman et al. Ann Allergy 1993;71:121-6



Computer simulation test

Conclusion:

1. Learning performance of normal child is superior to allergic child.
2. Loratadine improved learning performance of allergic child.
3. Diphenhydramine worsened learning performance of allergic child.



Vuurman et al. Ann Allergy 1993;71:121-6

Thank You

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