

ENT SAQ

By: 430 ENT team

Sinusitis (Nose III)

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❖ Note: please refer to the original lecture given by the doctor

The pictures were sorted by:
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Ear, Nose
& Throat

Station 1:

Q1: Name this view?

Occipitomental (Waters' view) view

Q2: Mention the abnormality?

Maxillary opacity (Mention is it Rt. or Lt.)

Extra picture to understand more.



Station 2:

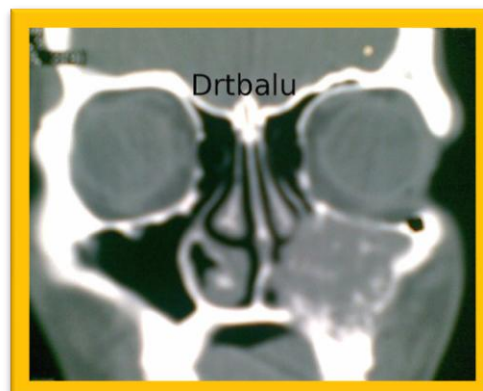
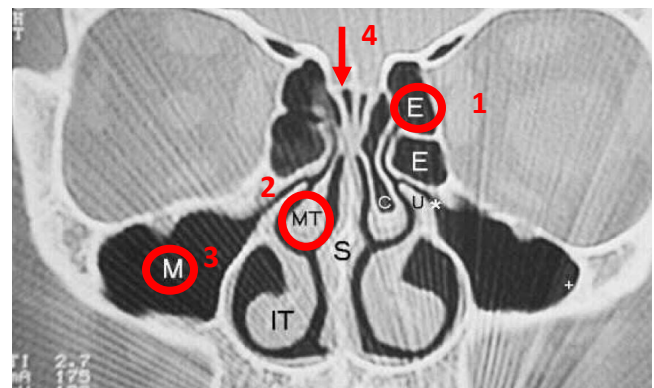
Q: Identify 1, 2, 3, 4.

1 → Ethmoidal Sinus

2 → Middle turbinate.

3 → Maxillary Sinus.

4 → Cribiform palate.



Station 3:

Patient complaining of para nasal sinusitis

Q1: what is the diagnosis?

A1: Orbital cellulites that became complicated with cavernous sinus thrombosis --> Chemosis

Q2: What is the type and view of the image obtained?

A2: Axial MRI

Q3: What is the most likely site of infection?

A3: Ethmoidal sinus



Station 4:

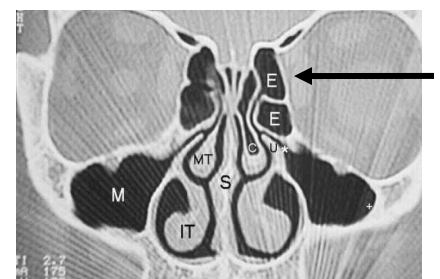
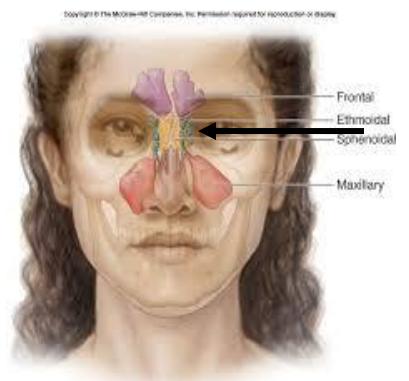
Q1: Identify the black arrow?

Ethmoidal sinus

Q2: Mention 2 cranial nerves supplying the nasal cavity?

Olfactory nerve

Trigeminal nerve (ophthalmic and maxillary)



Station 5:

CT scan for sinuses. Pt. is coming with facial pain for 6 days

Q1: What is the diagnosis?

A1: Acute Maxillary Sinusitis

Q2: Give 2 abnormality you see in the CT?

A2:

- 1- Total homogenous opacification of left maxillary sinus.**
- 2- Total homogenous opacification of left ethmoidal sinus.**
- 3- Right inferior turbinate hypertrophy**



Station 6:

Patient comes with fever and purulent discharge from the nose

Q1: Diagnosis?

Q2: Treatment?

A1: Right Orbital cellulites as a complication of sinusitis

A2: Admit pt. and give IV antibiotic



Station 7:

A child came with history of fever and nasal discharge

Q1: diagnosis?

A1: Left orbital subperiosteal abscess

Q2: What is the source of this problem?

A2: Ethmoidal sinus infection

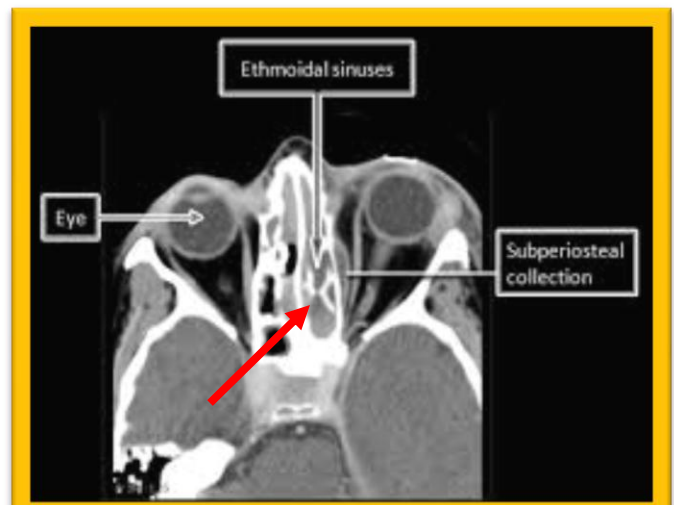


IMP. (difficult to distinguish between a subperiosteal abscess and orbital cellulitis and a CT scan may be helpful.) Need CT



Orbital Cellulitis

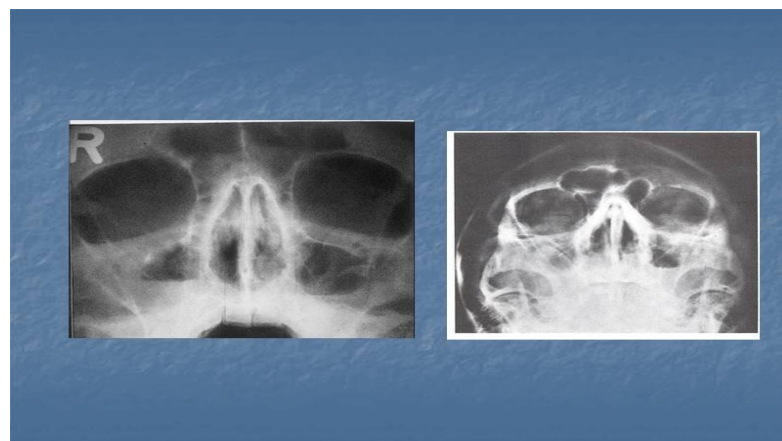
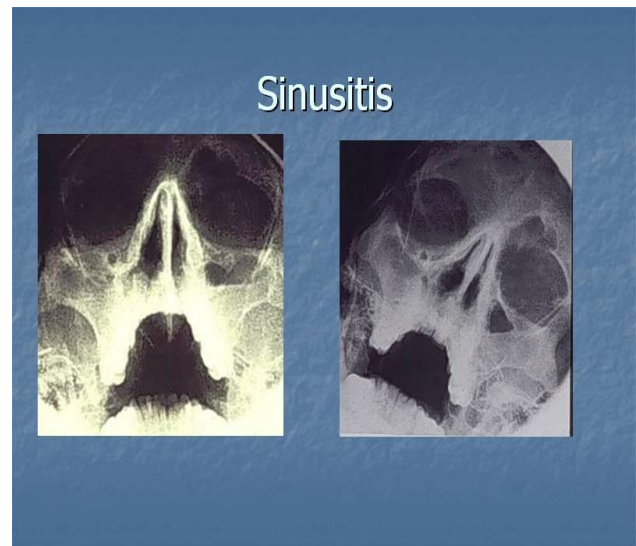
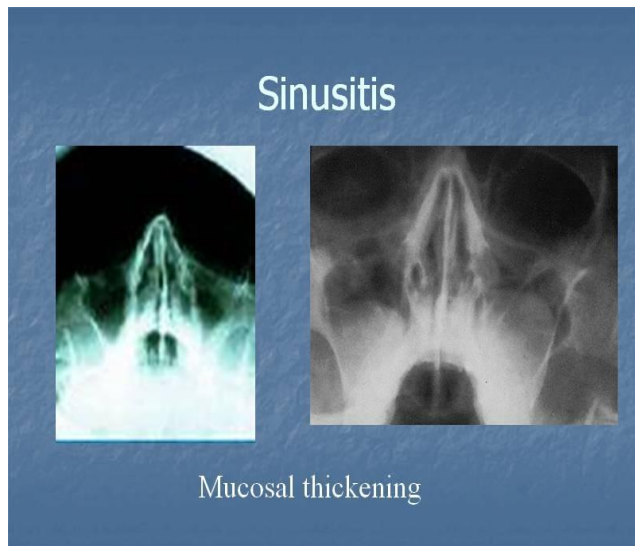
Look at the ethmoid bone
nothing is around it



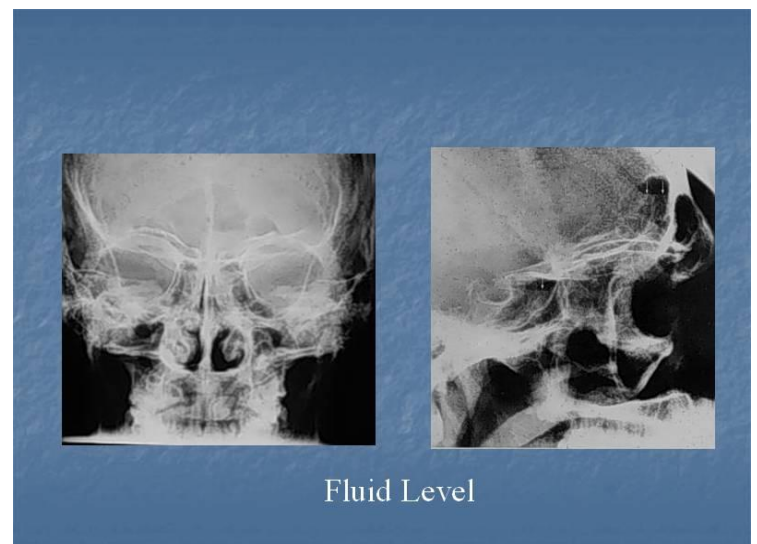
Subperiosteal Abscess

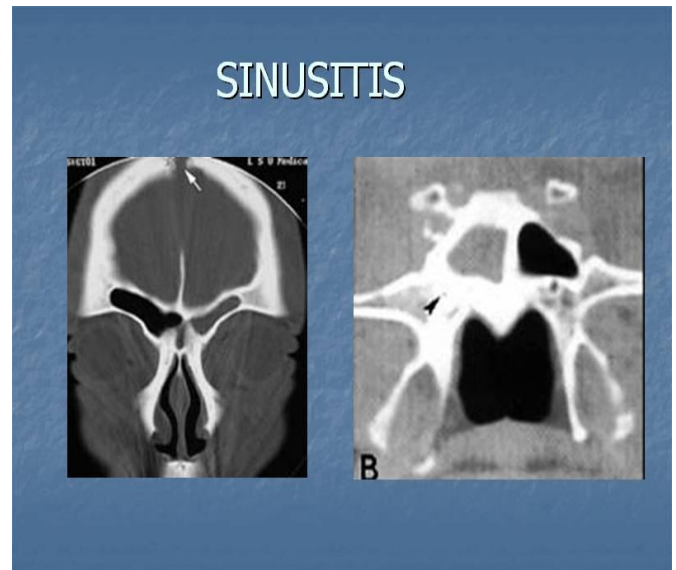
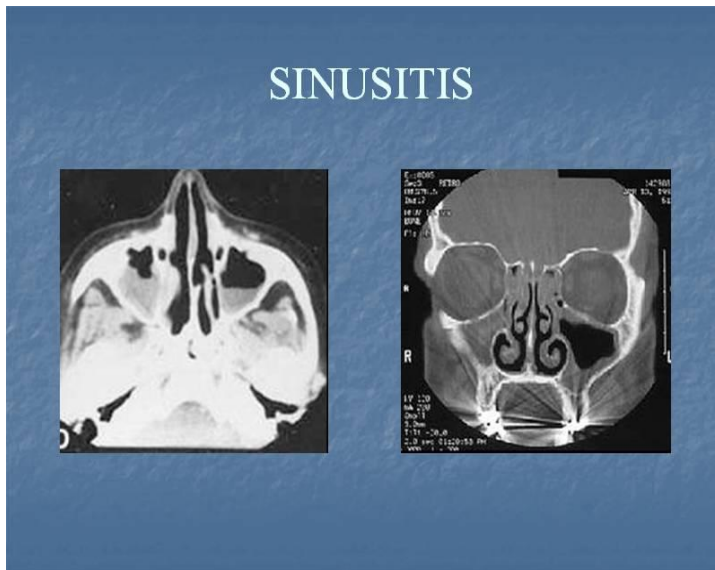
Look at the bone there is
opacity around it

Sinusitis X rays



Fluid Level

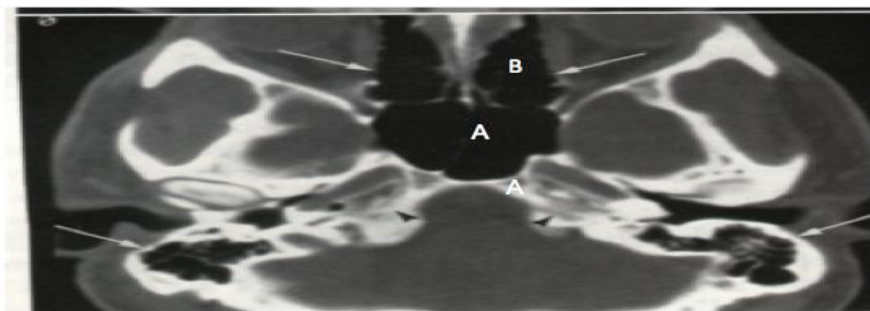


CT**Station 8:**

What is the name of these structures: A, B ?

A: Sphenoid sinus

B: Ethmoid sinus



- A- What is the name of the structure marked by the letter A
- - Sphenoid sinus
- B- What is the name of the structure marked by the letter B
- - ethmoid sinus

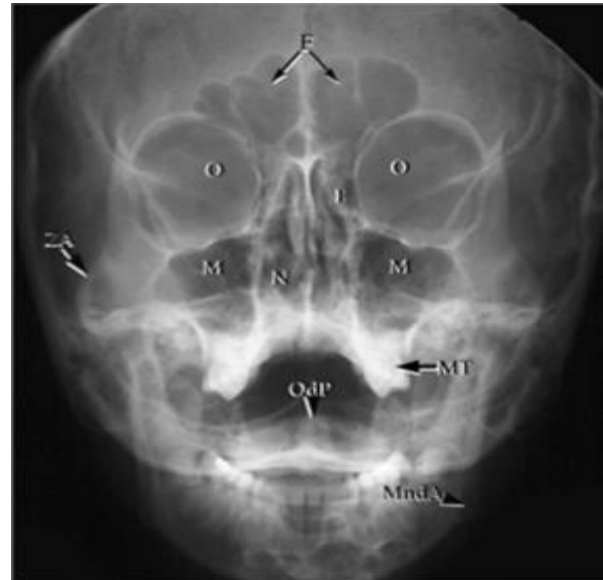
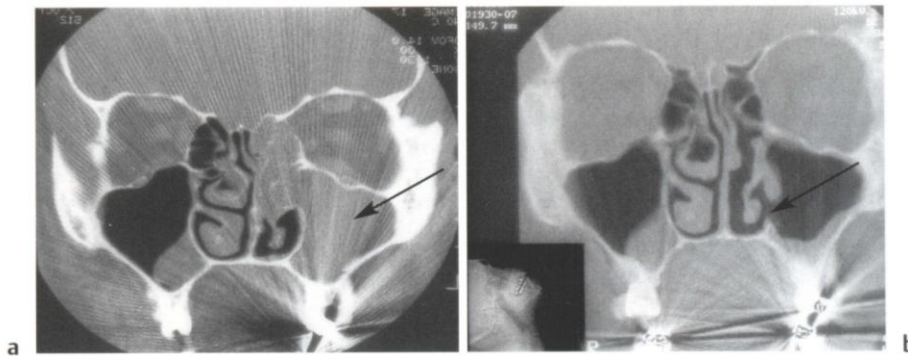
Station 9:**Q1: what is this view ?****Occipitofrontal view of skull X-ray****Q2: Identify****Nasal septum****Inferior turbinate****Maxillary sinus****Ethmoid sinus****Acute Maxillary sinusitis****Acute Maxillary Sinusitis**

Fig. 3.57a, b A CT scan showing total opacity of the left antrum and ethmoids due to infection (arrows). Clearing and a return to a normal CT scan of an infected maxillary and ethmoidal sinuses following intranasal antrostomy (arrow). In this instance the antrostomy (or opening into the maxillary antrum), has been made through the inferior meatus. It is more commonly made through the middle meatus.

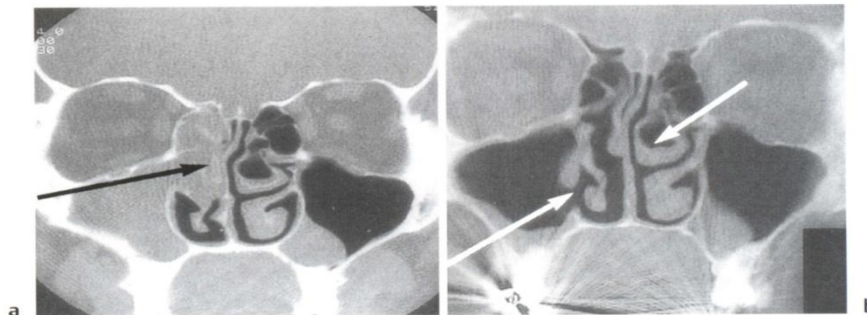


Fig. 3.67 CT scans to show the sinuses. CT scans give a much more detailed picture of the maxillary, ethmoid, frontal, and sphenoid sinuses. They are routine when endoscopic sinus surgery is anticipated, and are also of additional help to the plain sinus radiograph for diagnosis. CT scans, however, involve considerably more radiation to the orbit and are expensive. Opacity of the ethmoid sinuses characteristic of infection is seen (a, arrow). Also seen is an air cell in the middle turbinate (concha bullosa; b, upper arrow) and a right intranasal antrostomy into the maxillary sinus (b, lower arrow).

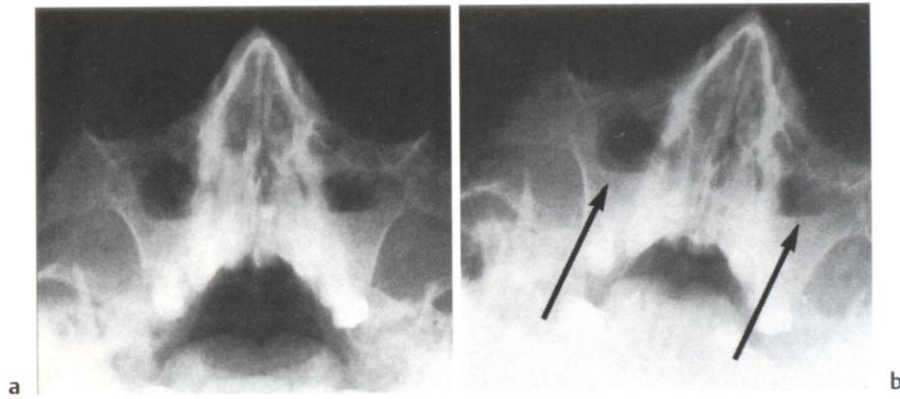


Fig. 3.66a, b **Maxillary sinus radiographs.** In acute and chronic maxillary sinusitis, a fluid level may be seen on radiography. A tilted view is taken to confirm the presence of fluid (**b**, arrows). A thickened or rather “straight” mucous membrane may look like a fluid level, as may a bony shadow if the radiograph is wrongly angled.

Station 10:

Q1: What is the name of this procedure?

A1: Frontal sinus trephine (not FESS)

Q2: Mention 2 organisms that cause this condition?

A2: H. influenzae, S.pnumoniae



Sation 11:

Q1: Name this view and modality?

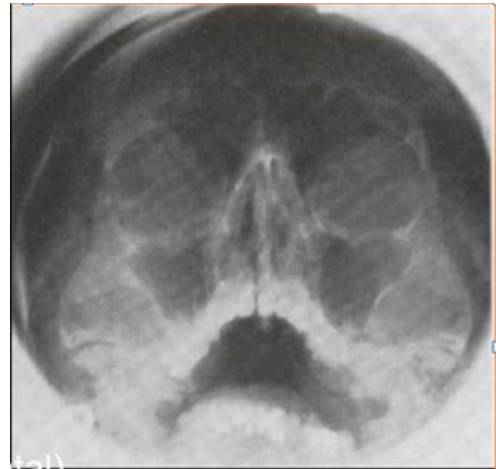
A1: Coronal CT scan

Q2: Mention 2 abnormalities?

A2:

- Complete hemogenous opacity of the right maxillary sinus
- Deviated nasal septum
- Hypertrophy of the left middle turbinate



Station 12:**Q1: What is the view? Occipitomental (Waters view)****Q2: Mention 2 abnormalities?****A2: Complete opacity of the right maxillary sinus****Fluid level in the left maxillary sinus****Station 13:**

This is 14 y/o. boy with history of fever, headache.
No visual involvement.

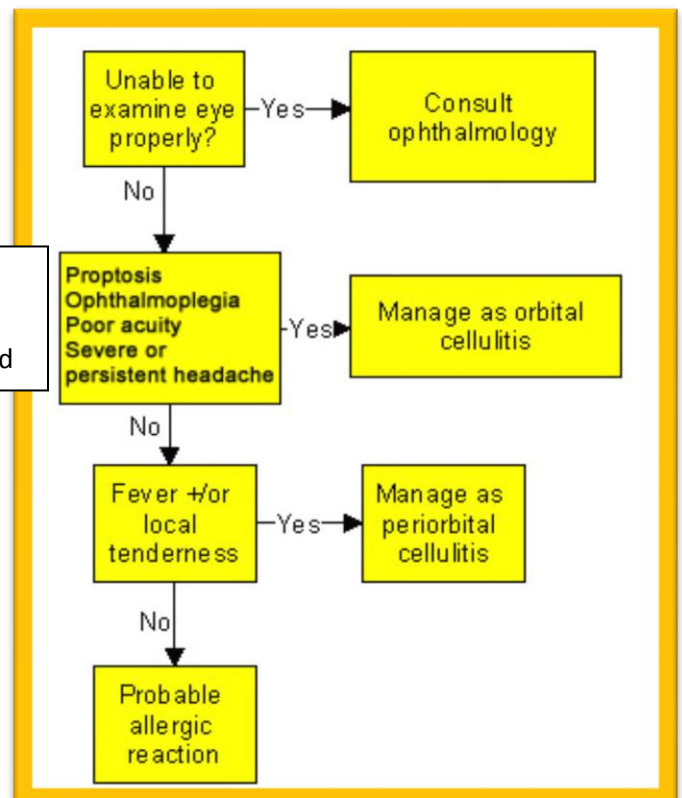
Q1. Mention 2 causes for such a case?

***Preseptal Cellulitis (extraorbital) (Vision, motility, pupils, VF, disc are WNL -Within Normal Limit-)**

***Allergic Eyelid Swelling**

***If there is visual involvement ..*****Q. Mention four causes for such a case?****Orbital cellulitis****Periorbital cellulitis****Cavernous sinus thrombosis****Sinusitis**

Vision
will be
involved



Station 14:

This is a CT of a child who presented with nasal discharge, congestion, fever for the last 5 days. 2 days later he developed left eye proptosis

Q1: What is most likely diagnosis?

A1: orbital subperiosteal abscess

Q2: How do we treat this problem?

A2: IV antibiotic and drainage

**Station 15:**

Q1: What do you see in this patient?

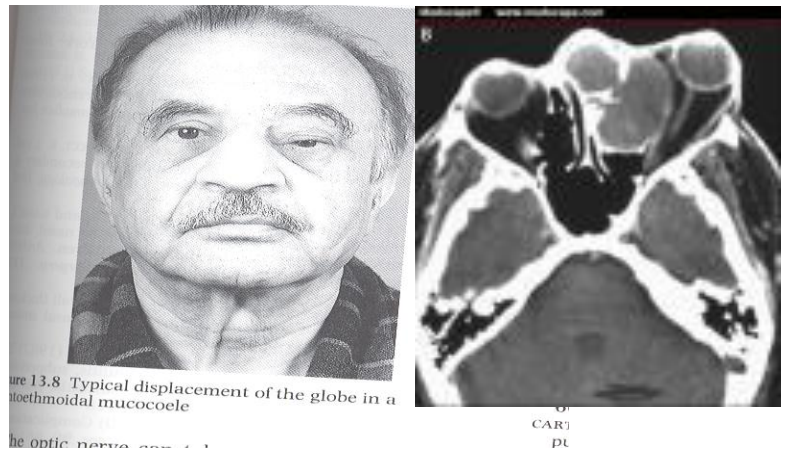
A1: Globe displacement due to sinusitis

Q2: What is the risk factor?

A2: complications of sinusitis

Q3: How do we treat?

A3: Surgical drainage and sometime it require endoscopic surgery

**Station 16:**

Q1: What is this benign lesion?

A1: Inverted papilloma

Q2: Mention 2 organisms that cause acute sinusitis?

A2: - Streptococci

- H. Influnzae



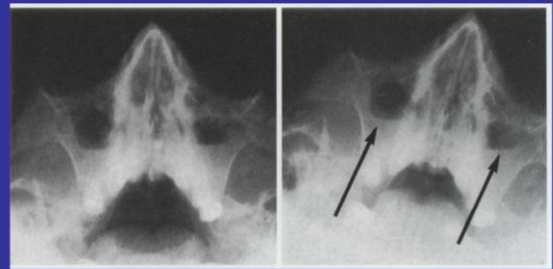
Station 17:

What is view and modality?

Xray - Occipitomeatal (Waters' view) view

Maxillary sinus radiograph (xray)

3.66 Maxillary sinus radiographs (p. 142)

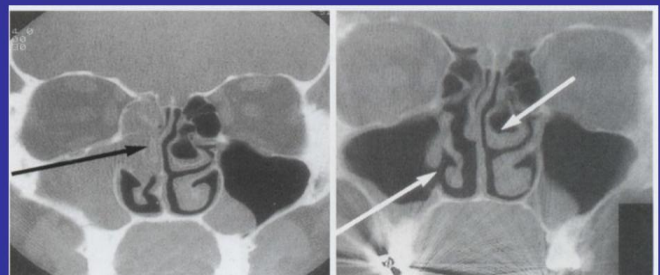


Station 18:

What is this modality? CT

What are the arrows pointing at? Sinuses

3.67 CT scans to show the sinuses (p. 142)



Station 19:

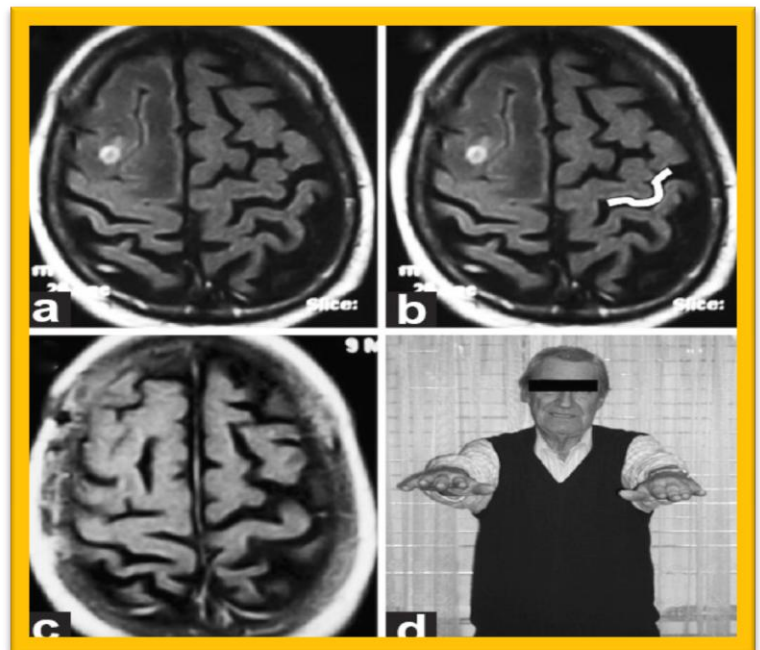
Axial CT of brain showing right Space occupying lesion in the right frontal lobe. (It was a different picture so it might not have the same findings)

Q1: what is the diagnosis?

A1: Right frontal lobe brain abscess

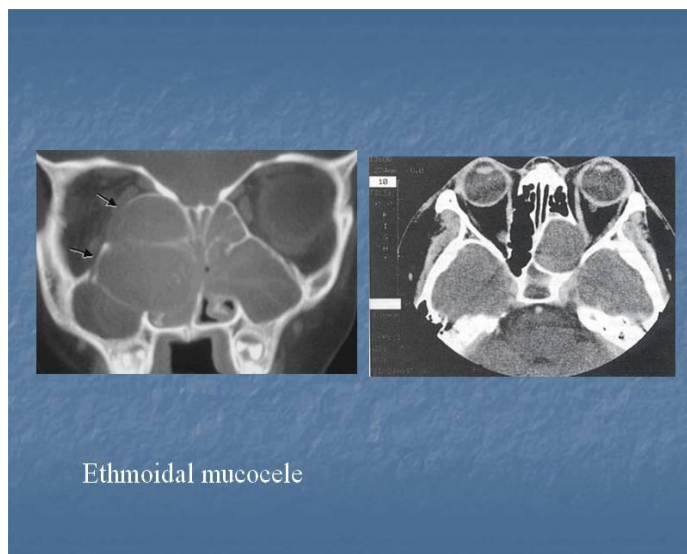
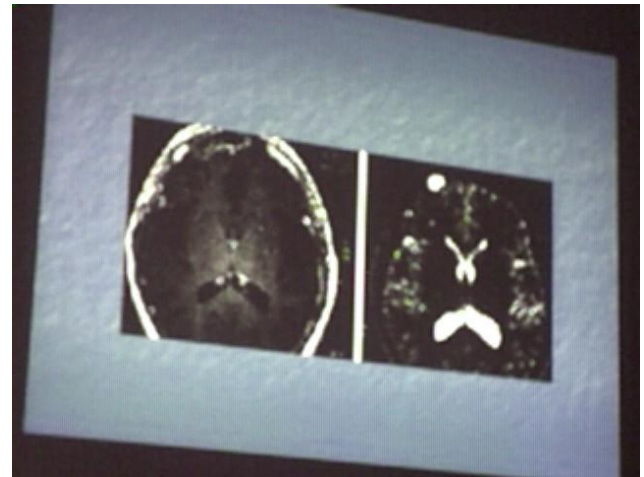
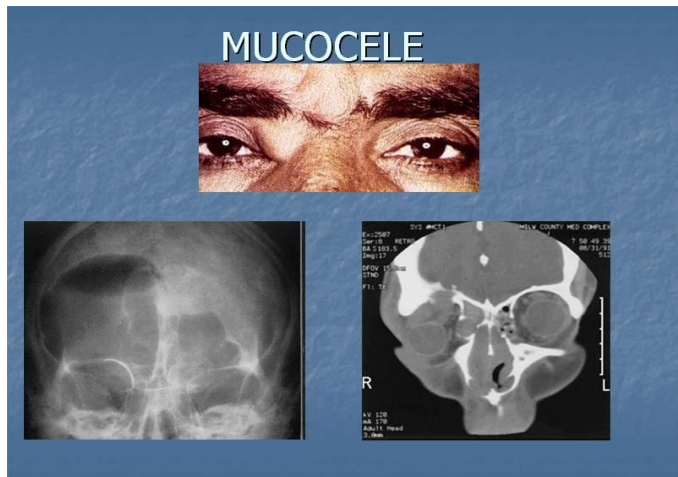
Q2: What investigations are contraindicated in this condition?

A2: Lumbar puncture

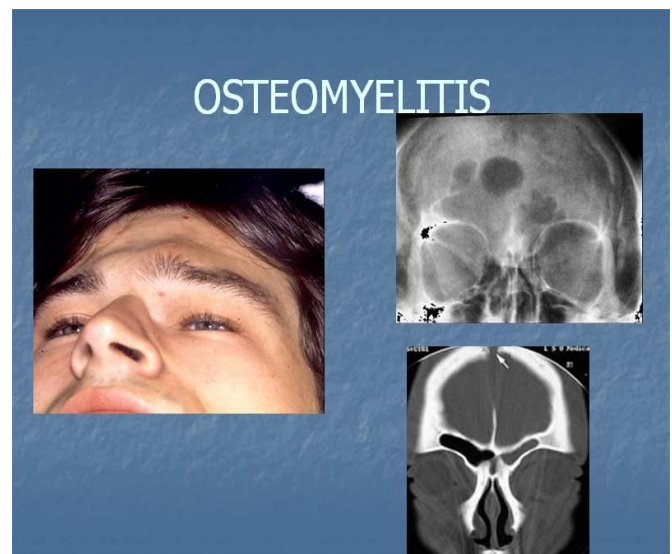


What are the complications of bacterial sinusitis?

- Pharyngeal, laryngeal and ear infection
- Mucolcele
- Osteomyelitis
- Orbital complications
- Intracranial complications

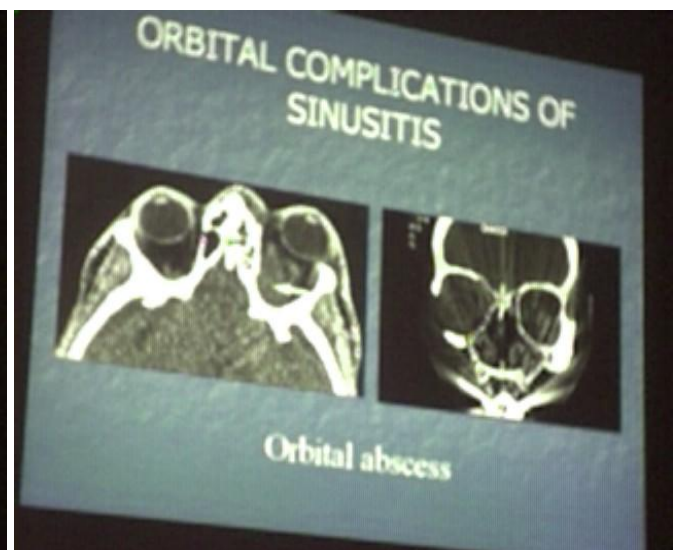
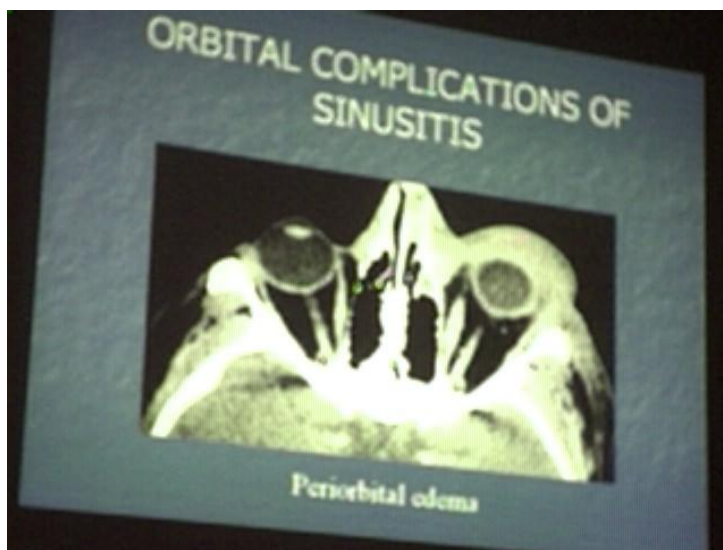
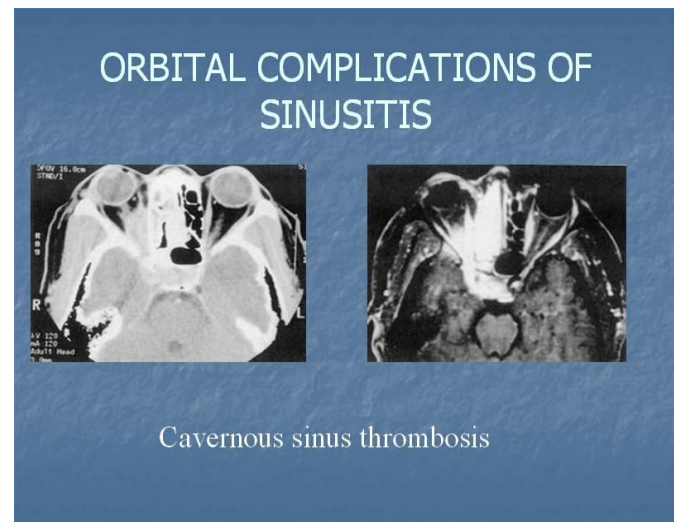
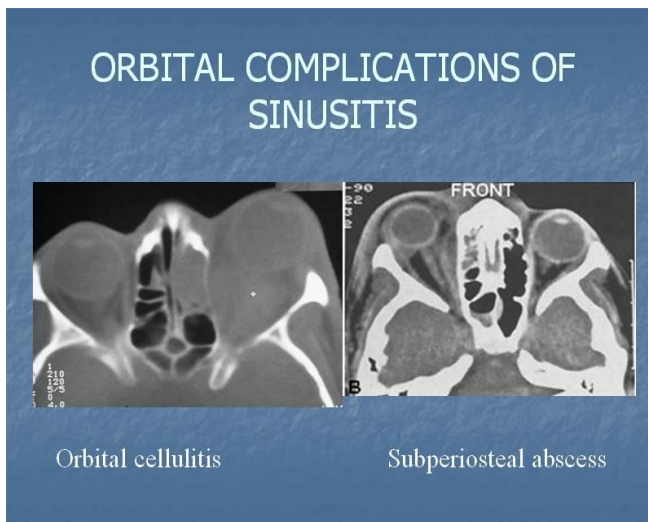


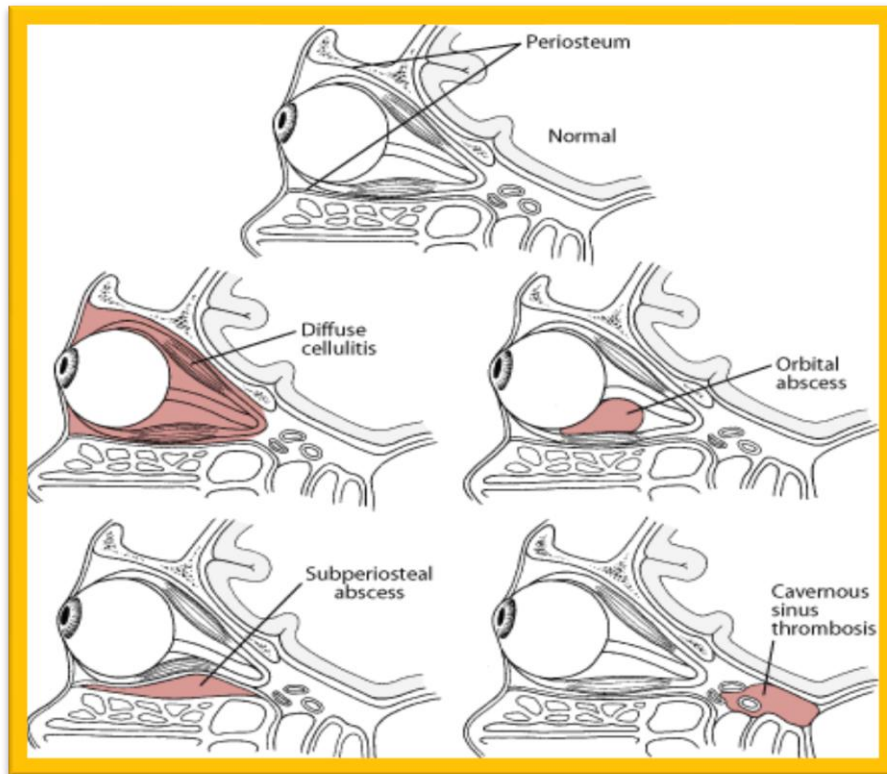
Ethmoidal mucocoele



What are the orbital complications of sinusitis?

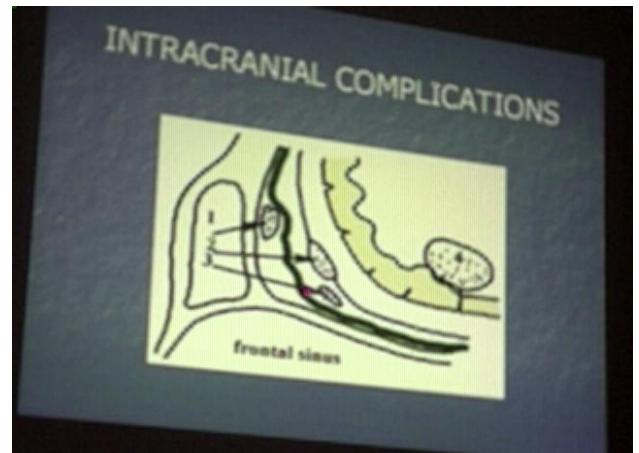
- **Periorbital inflammatory edema**
- **Orbital cellulitis**
- **Subperiosteal abscess**
- **Orbital abscess**
- **Cavernous sinus thrombosis**



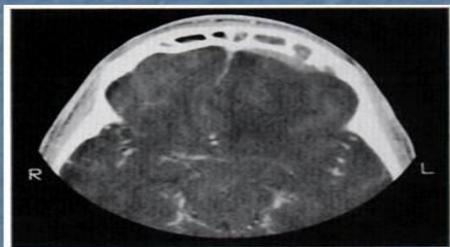


What are the intracranial complications of bacterial sinusitis?

- Subdural abscess
- Frontal lobe abscess



INTRACRANIAL COMPLICATIONS



Subdural abscess



Frontal lobe abscess