



2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

CASE PRESENTATION

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HOD DEPT OF RADIDIAGNOSIS

JJMMC, DAVANGERE

CASE PRESENTATION

MENTOR : Dr. Rahul S, Assistant professor, Dept. of radiodiagnosis

JJM MEDICAL COLLEGE, DAVANAGERE

PRESENTER: Dr. Sanjay, PG Resident

Clinical history:

A 45 year old male came with chief complaints of:

Fever, since 10 days

Diminision of vision ,redness and mild ptosis of left eye since 10 days

No H/o discharge /watering /previous surgery

K/c/o of Diabetes mellitus since 5 years , not taking regular medication

H/o thorn prick in left eye 1 month ago for which he has not received any treatment

O/E: Confused and disoriented

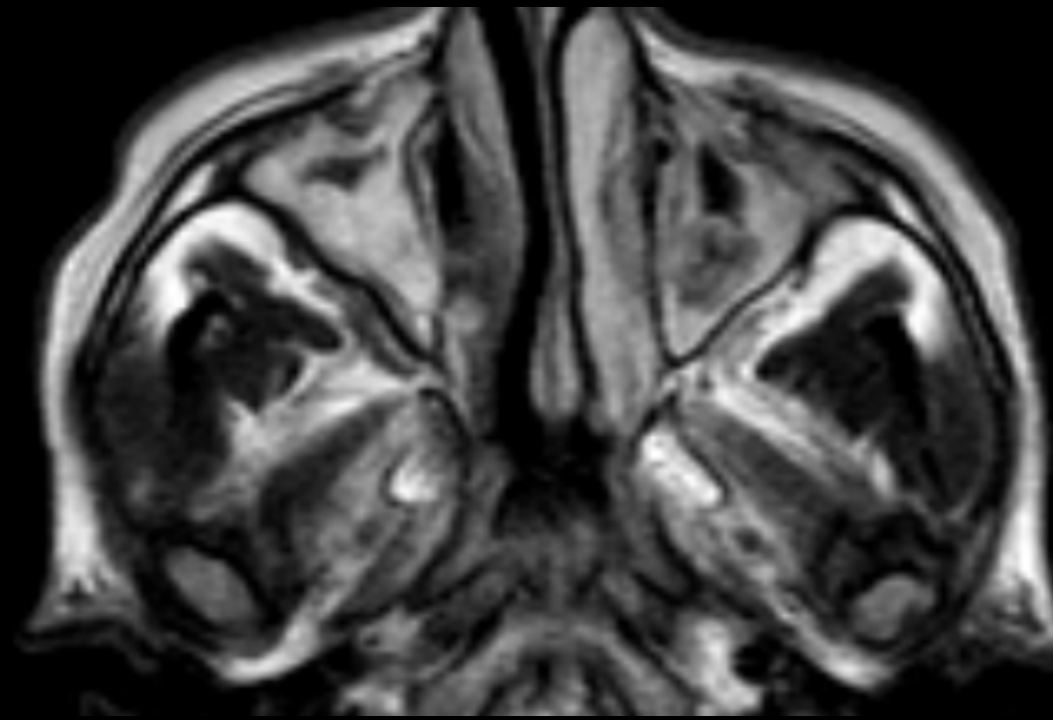
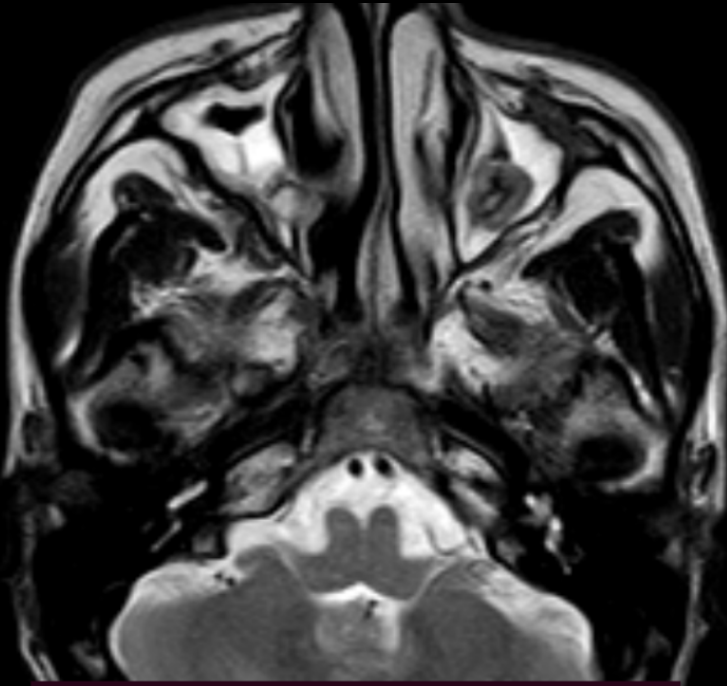
Ophthalmic examination has revealed few dot blot hemorrhages of macula and tortuous vessels noted in bilateral fundus

Impression: Bilateral non proliferative diabetic retinopathy changes

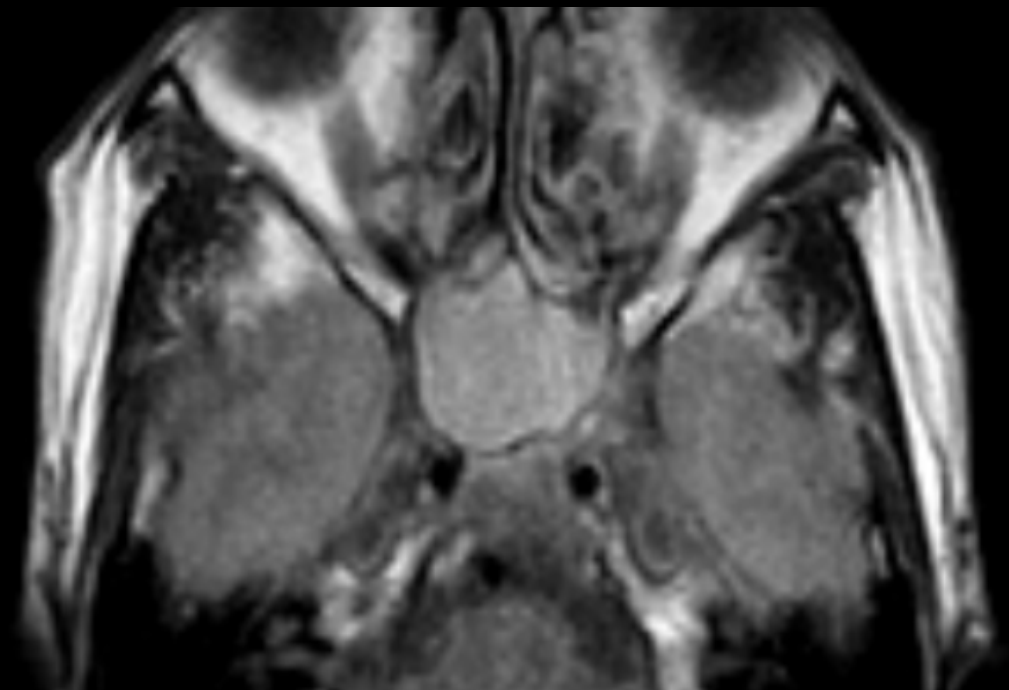
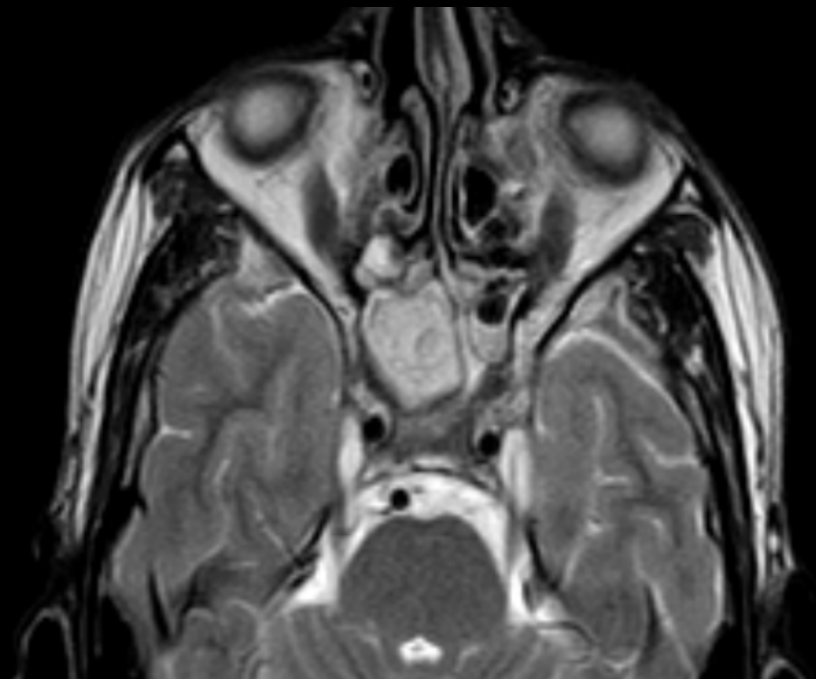
Lab investigations: TLC 14,000 | , HBA1C- 12 % (Poor control>7.5%), urine routine revealed pus cells

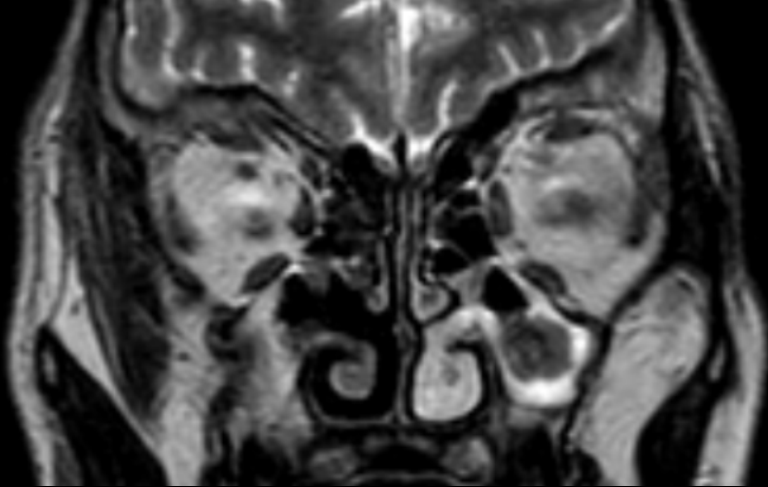
Patient was advised MRI brain to rule out Mucormycosis

T2 AND FLAIR, AXIAL



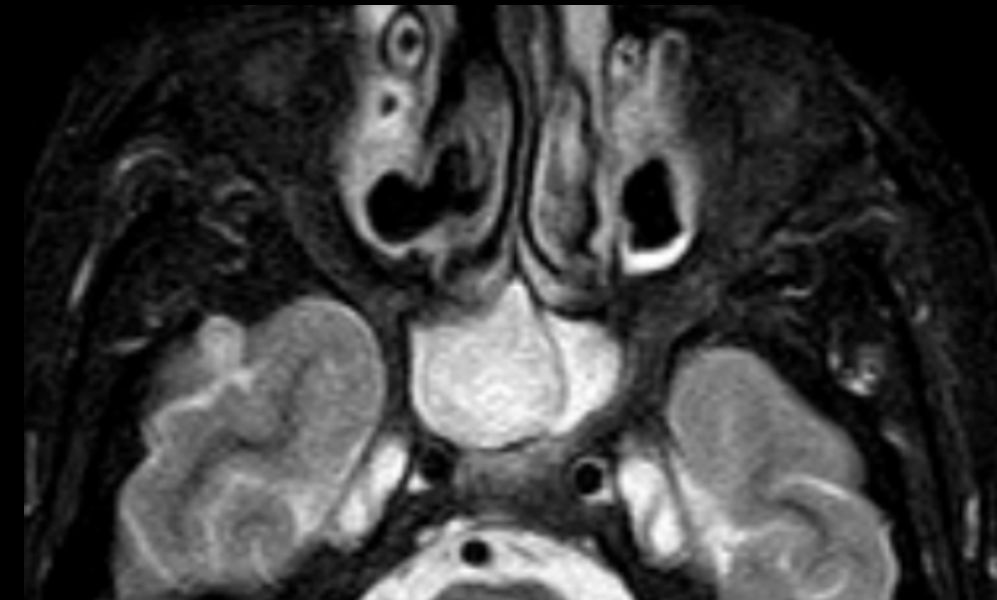
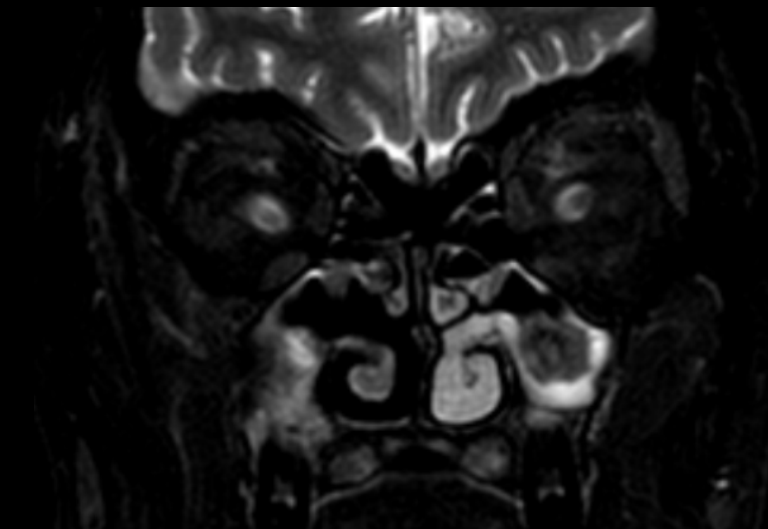
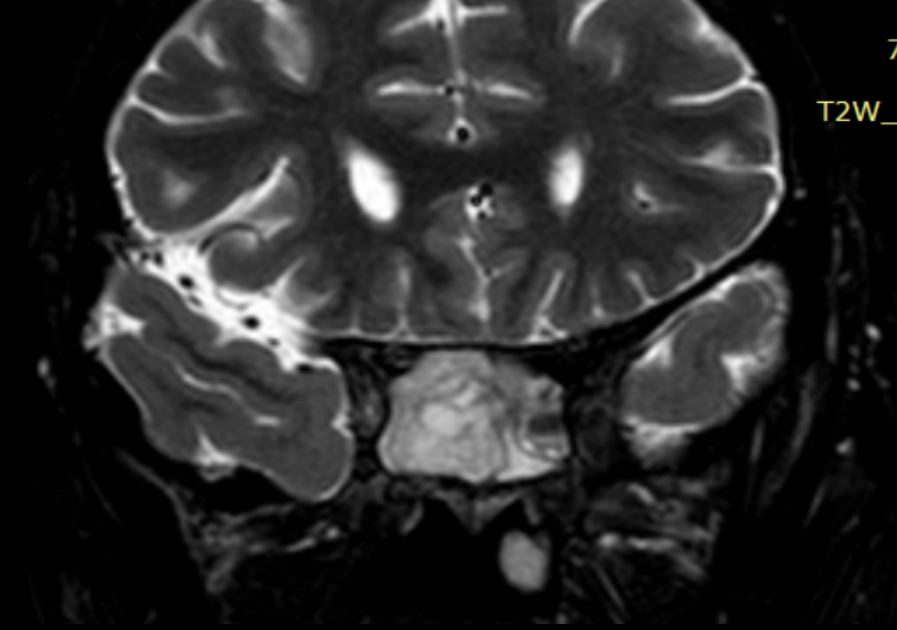
T2/FLAIR Heterogenous
predominantly hypointense soft
tissue noted in left maxillary sinus
with mucosal thickening noted in
bilateral maxillary sinuses
T2/FLAIR heterogenous
hyperintense soft tissue noted in
right sphenoidal sinus





Coronal T2W AXIAL AND CORONAL STIR

Evidence of T2 hypointense soft tissue with stir hyperintensity noted in left maxillary sinus
T2/STIR heterogeneously hyperintense soft tissue noted in right sphenoid sinus



isc

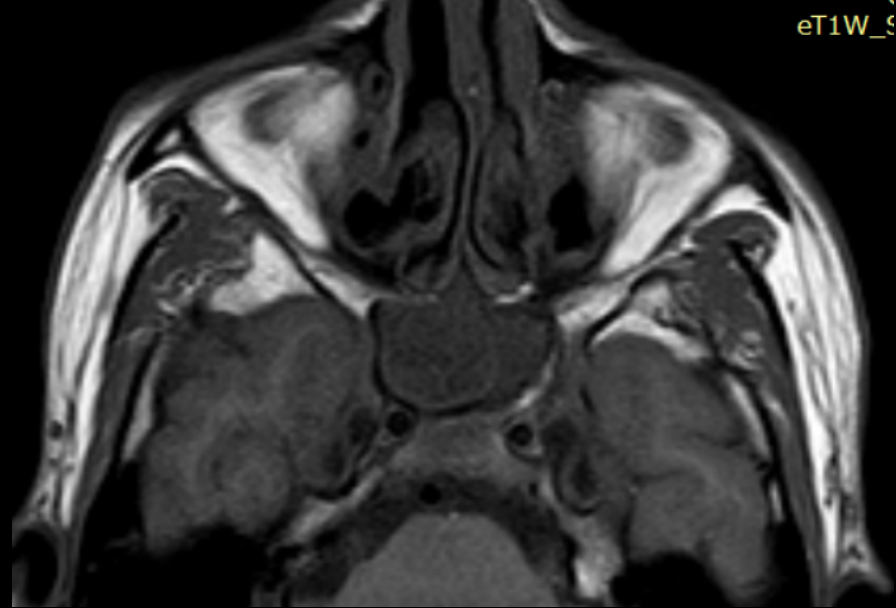
DWI and ADC Axial

dDW

Diffusion restriction noted in left
maxillary and peripheral area of
diffusion restriction seen in right
sphenoid sinuses

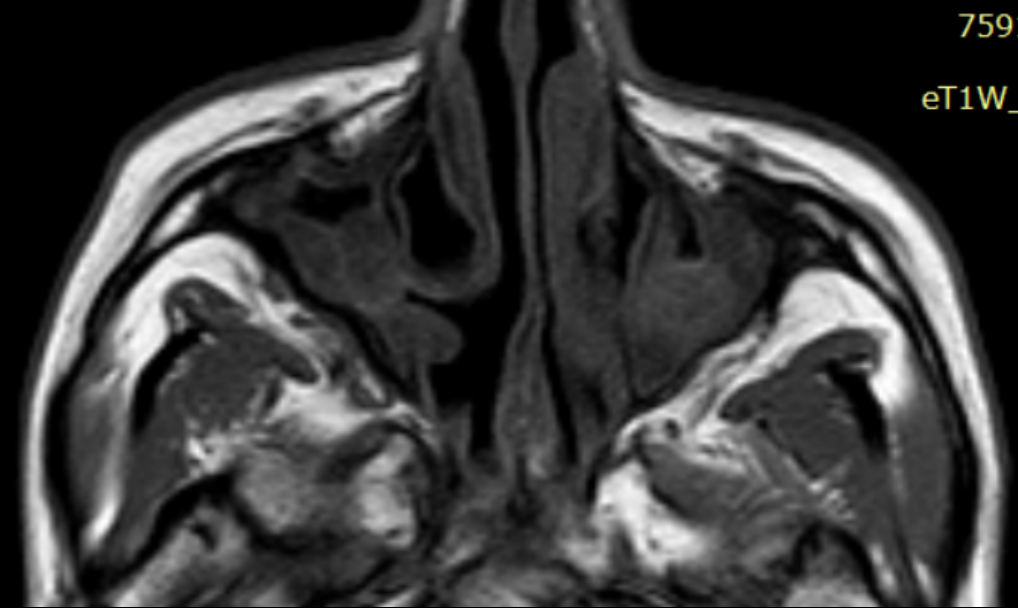
75

dDW



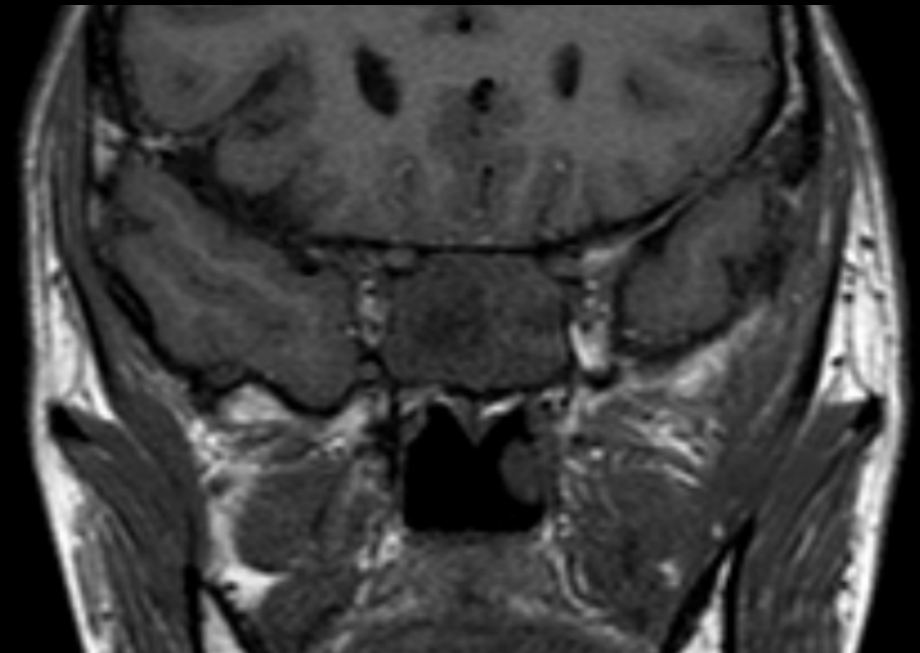
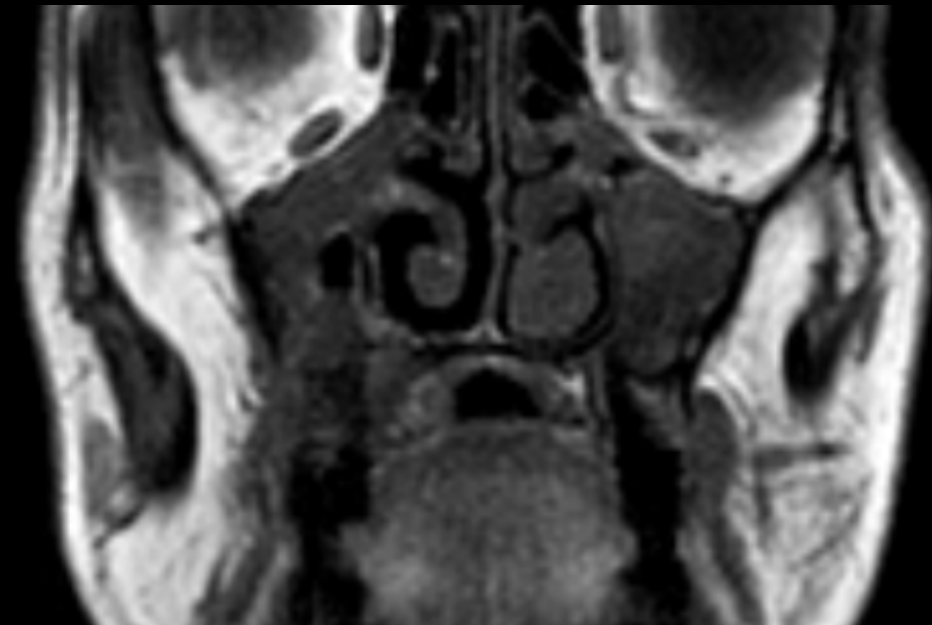
eT1W_S

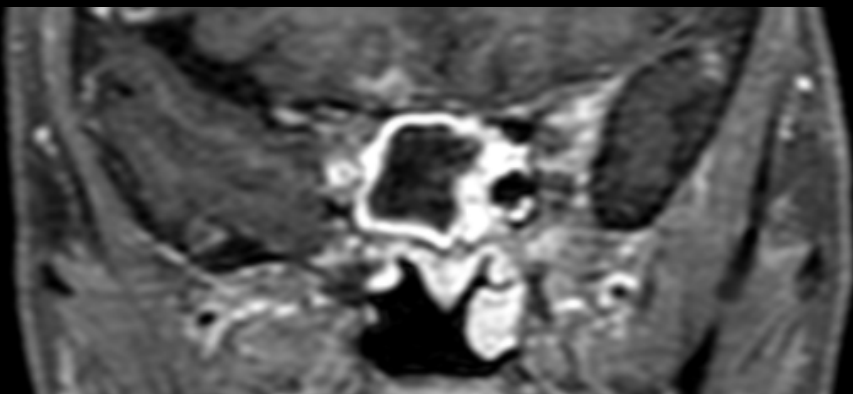
T1 heterogeneously hypointense soft tissue noted in left maxillary and right sphenoidal sinuses



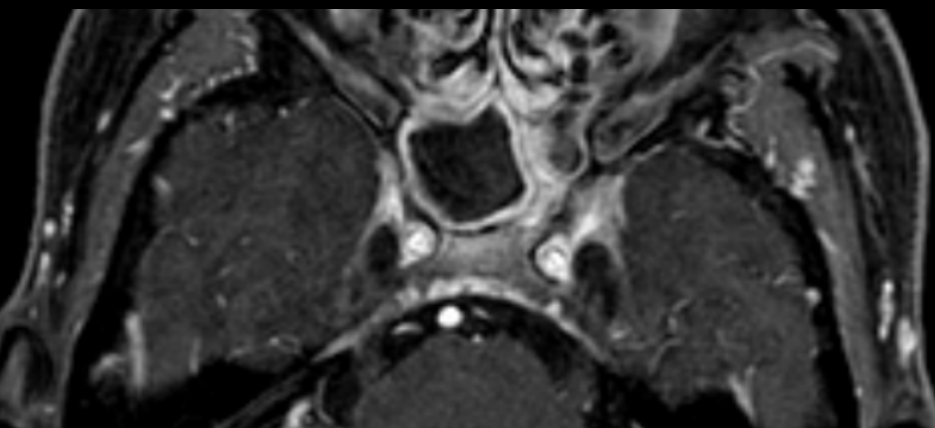
75914
O
eT1W_Si

T1W axial and coronal pre contrast

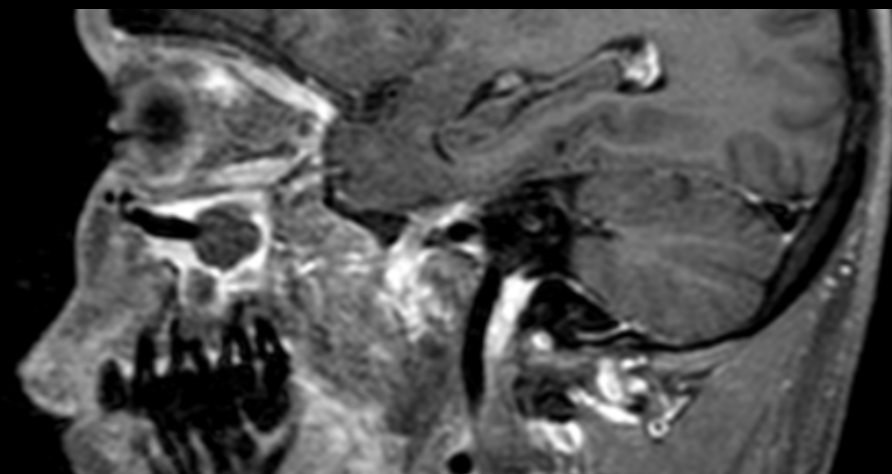
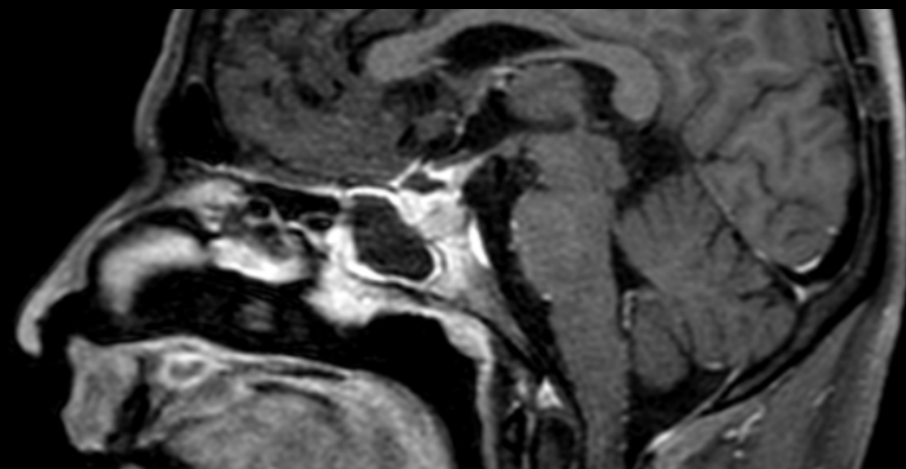
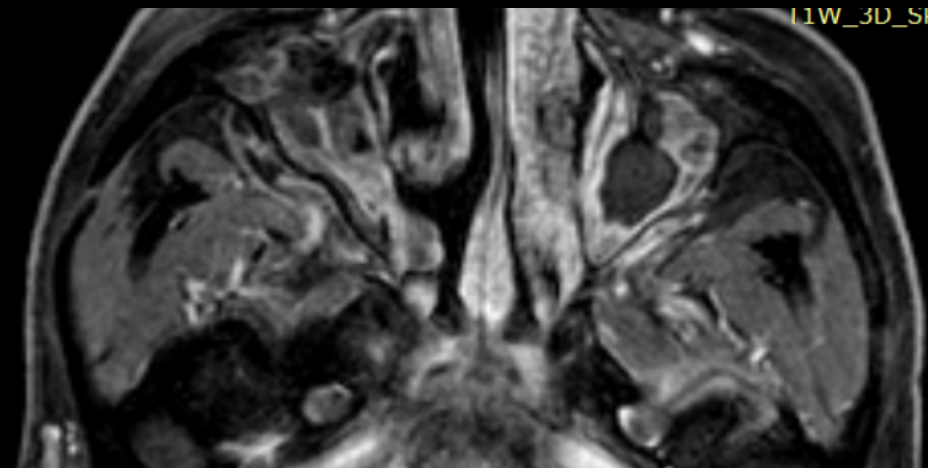




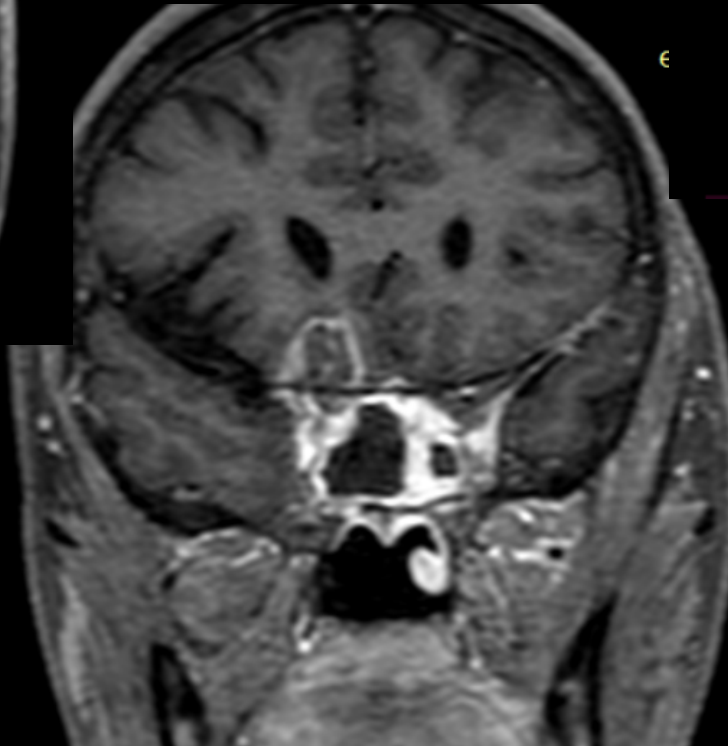
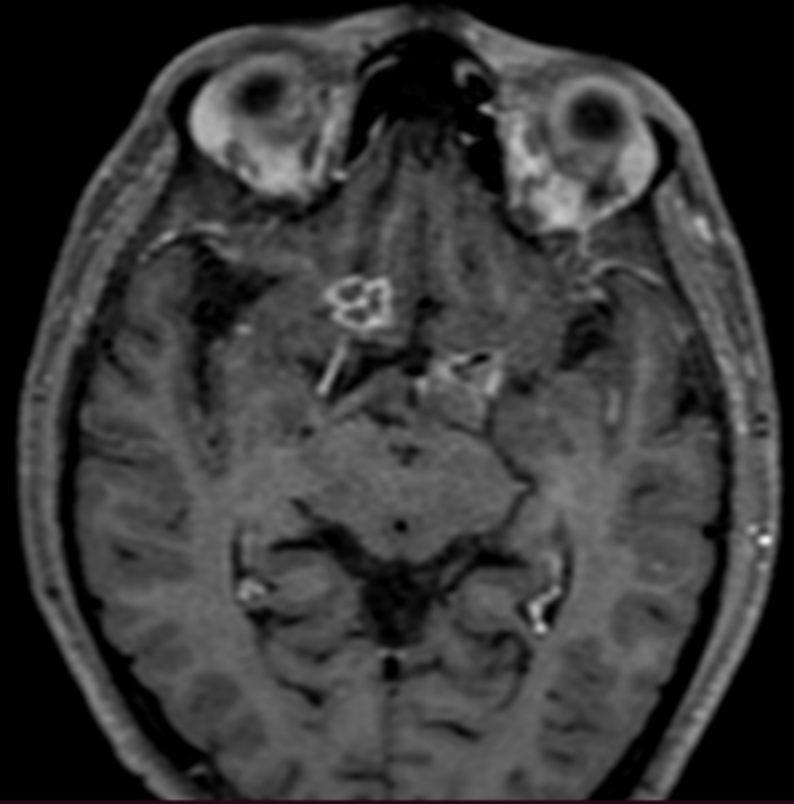
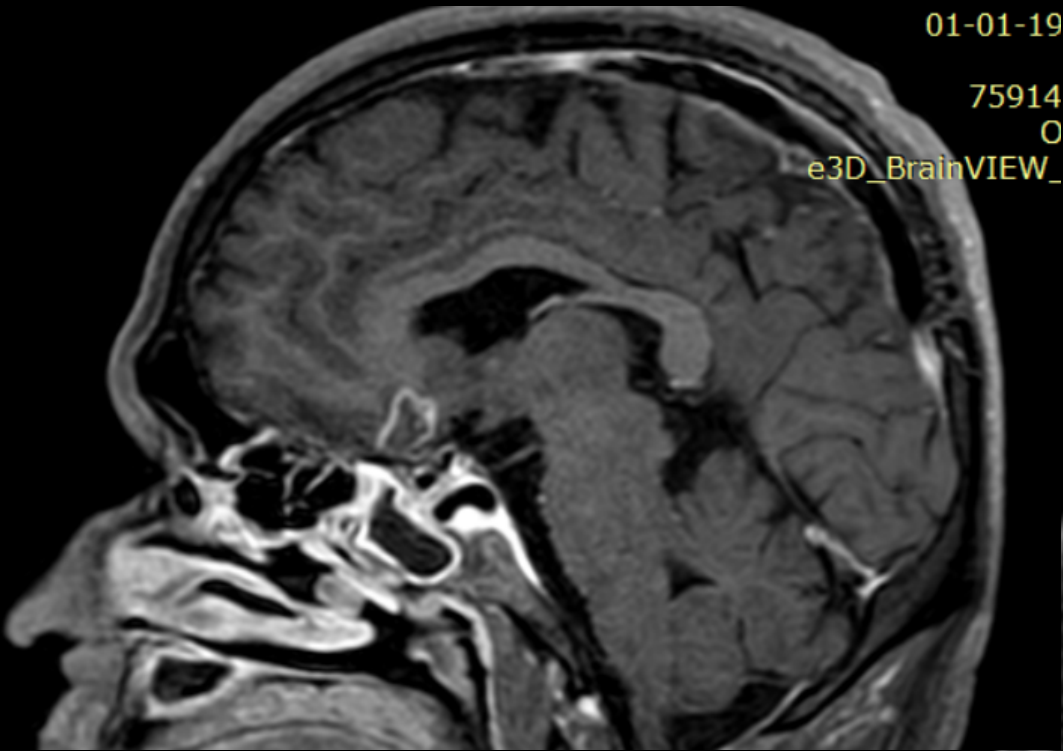
There is peripheral rim enhancing soft tissue with central non enhancing hypointensities in the sinuses involved – S/o Fungal tissue



Post contrast 3DT1

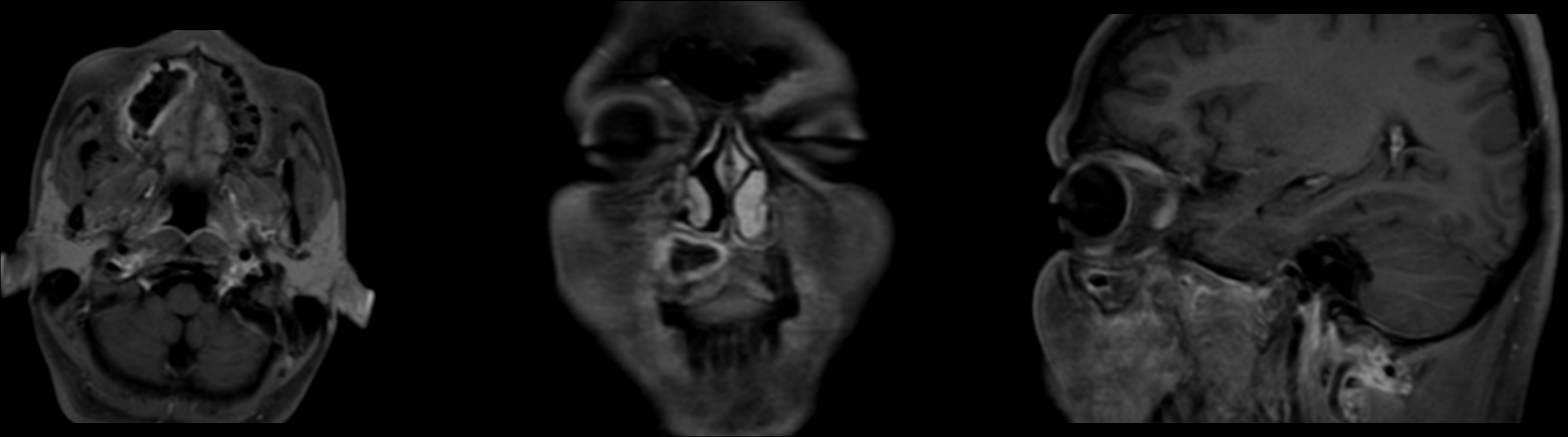


Post contrast T1W axial coronal and sagittal

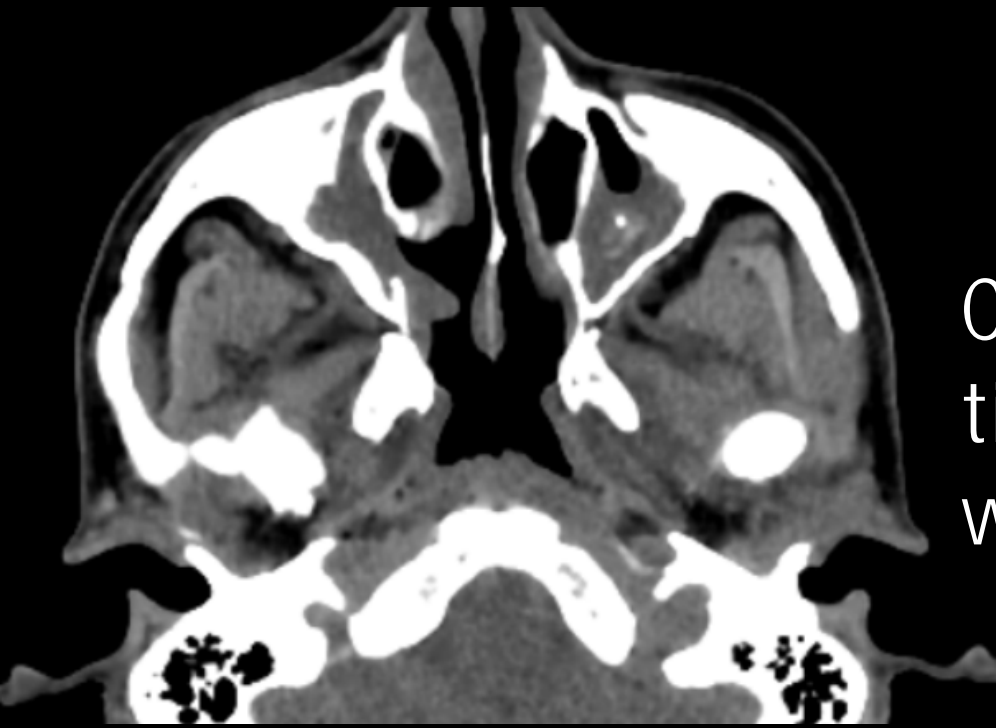


**Peripheral rim enhancing area is noted in
right basifrontal lobe , (the intracranial
extension) s/o Cerebritis**

Post contrast T1W all three planes



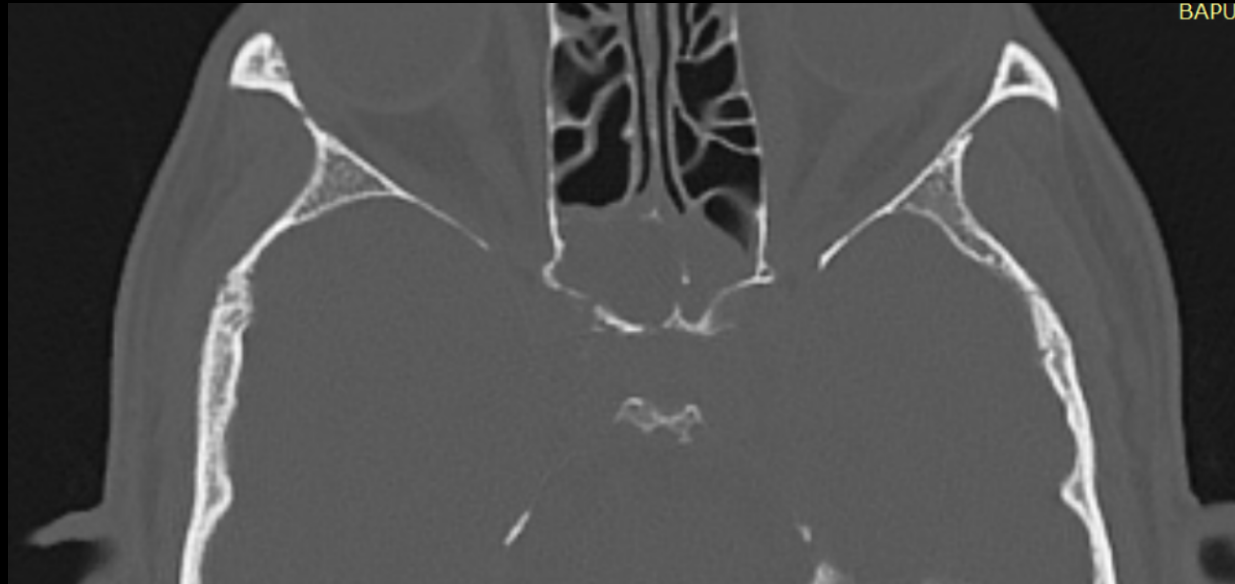
**Peripheral rim enhancement noted in right half of maxillary alveolar arch –
s/o Fungal Osteomyelitis**



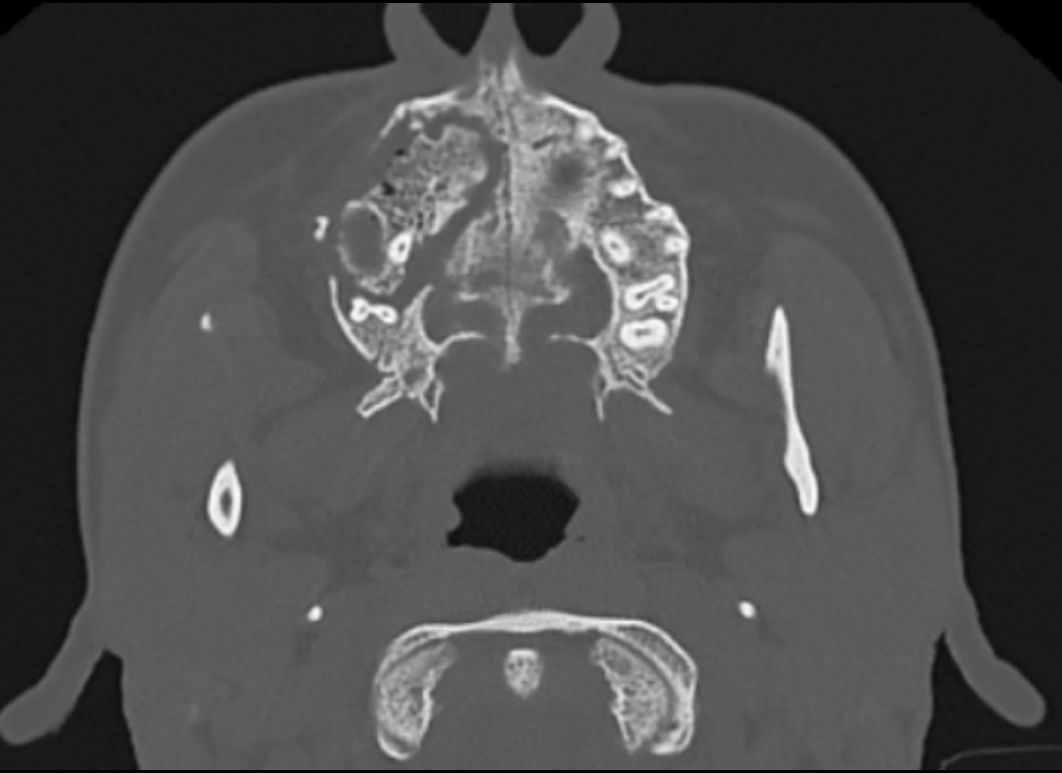
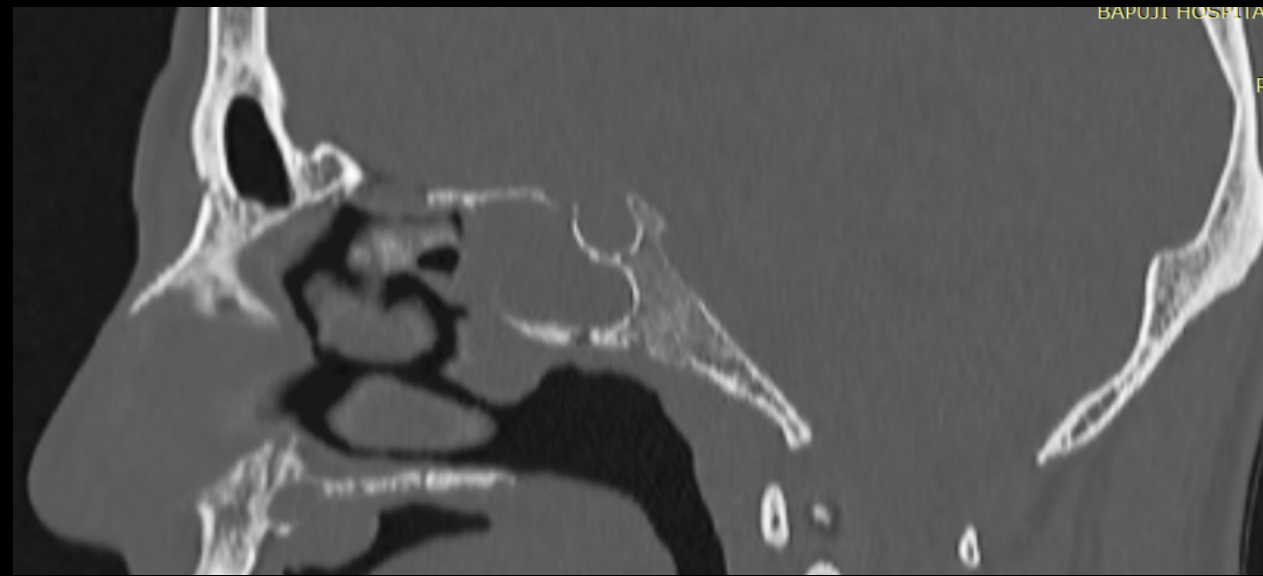
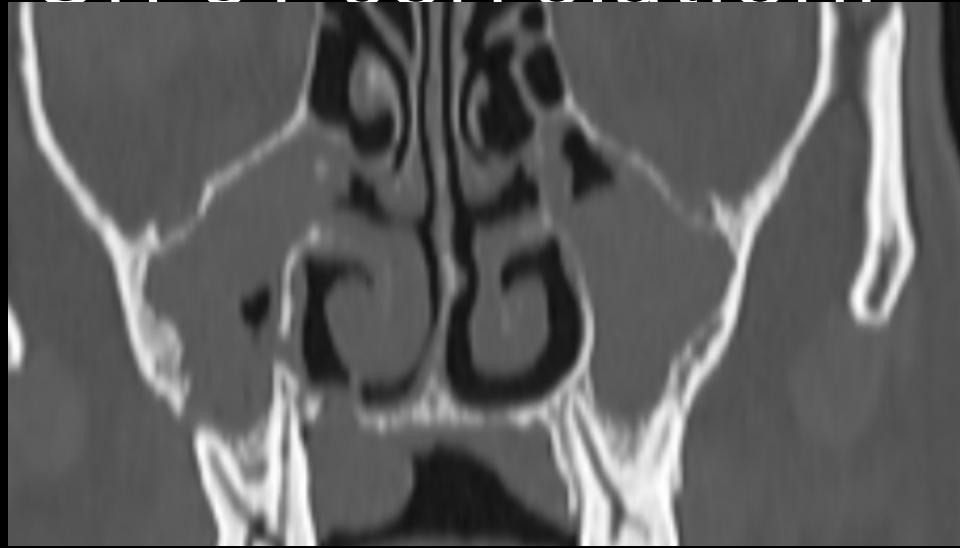
Ct axial soft
tissue and bone
window



**Soft tissue opacity
noted involving
bilateral maxillary
sinus, and sphenoid
sinus with
hyperdense foci
noted within left
maxillary sinuses**



On CT correlation:



- **Bony framework thinning and erosion of medial and lateral wall of right maxillary sinus, yoke of sphenoid, inter-sphenoid septa, right upper alveolar ridge**

Diagnosis

- Severe sinusitis is noted in bilateral maxillary, ethmoid and sphenoid sinuses.
- T2 hypointense non-enhancing soft tissue is noted in bilateral maxillary, posterior ethmoid and sphenoid sinuses – s/o Fungal tissue.
- Intracranial extension of above mentioned fungal tissue through sphenoid sinus into suprasellar cistern
- Peripheral rim enhancing area is noted in right basifrontal lobe – s/o Cerebritis
- T2 hypointense non-enhancing area with Peripheral rim enhancement is noted in right half of maxillary alveolar arch – s/o Fungal Osteomyelitis
- **→ F/S/O Acute Invasive Fungal Sinusitis with intracranial extension (cerebritis), as described.**