Clinical meeting 2018

Department Of Neurology

case -1
A case of Oscillopsia

- 56 yr old male
- Presented with c/o

- Difficulty in reading news papers with attacks of dizziness- 15 days

In that while reading news papers he found that the lines are moving . Such episodes last for 20-30 seconds and occur every 5-10 minutes throughout the day.

Onset abrupt.

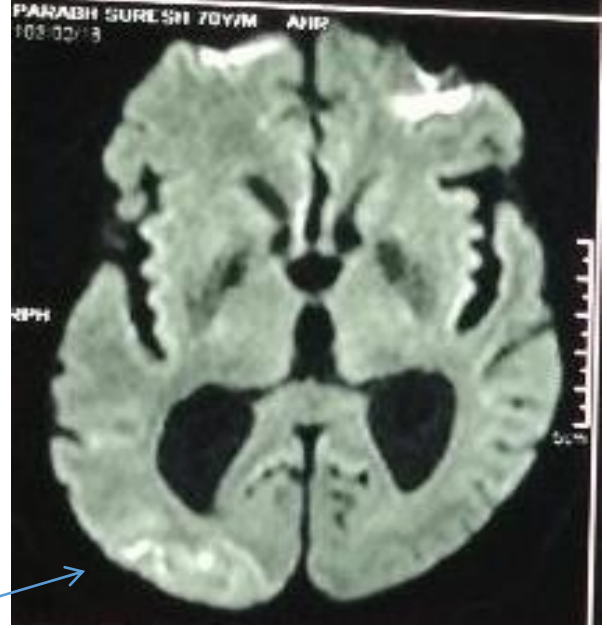
Associated with light-headedness but no true vertigo

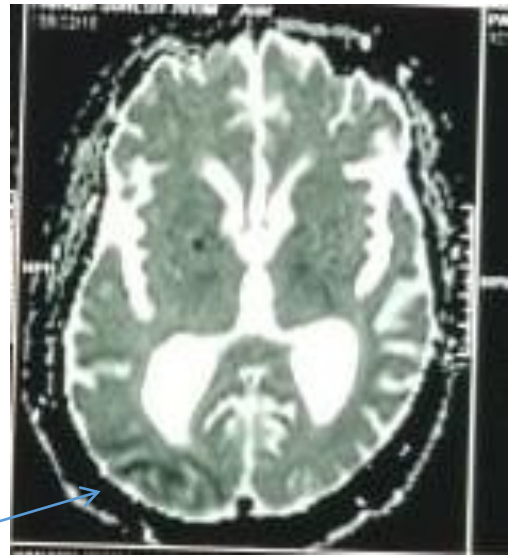
No past h/o DM, HTN, head injury , seizures, ear discharge, instability of gait

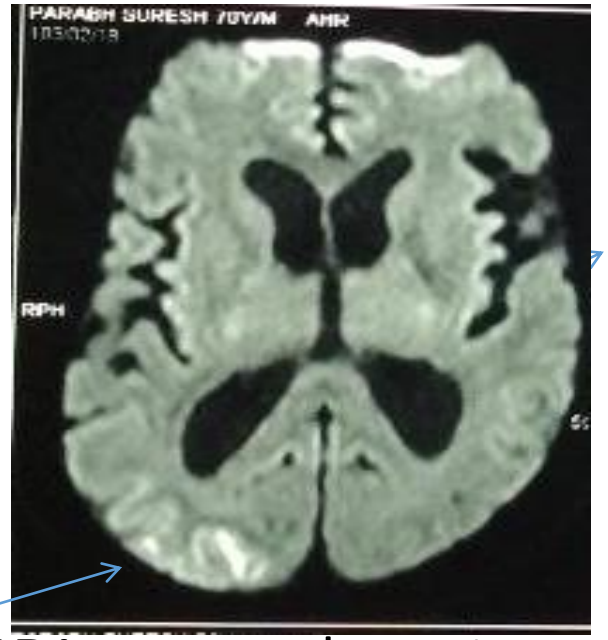
O/E

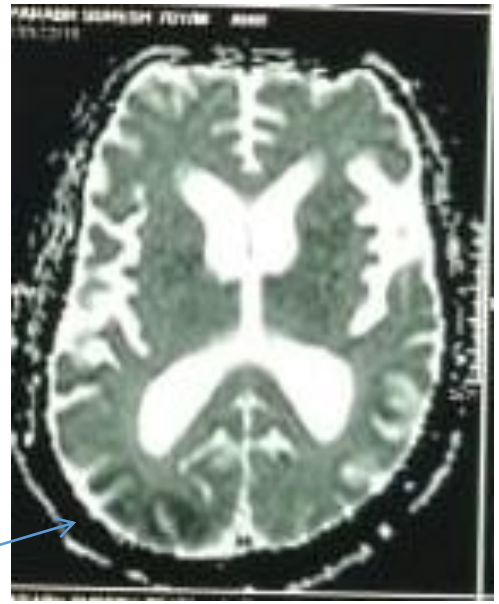
During exam patient developed deviation of gaze to left with nystagmus beating to left. The episode lasted for about 30 seconds. Extraoccular movements were full

Other neurological exam including Head impulse test, Dix Hallpike test were normal

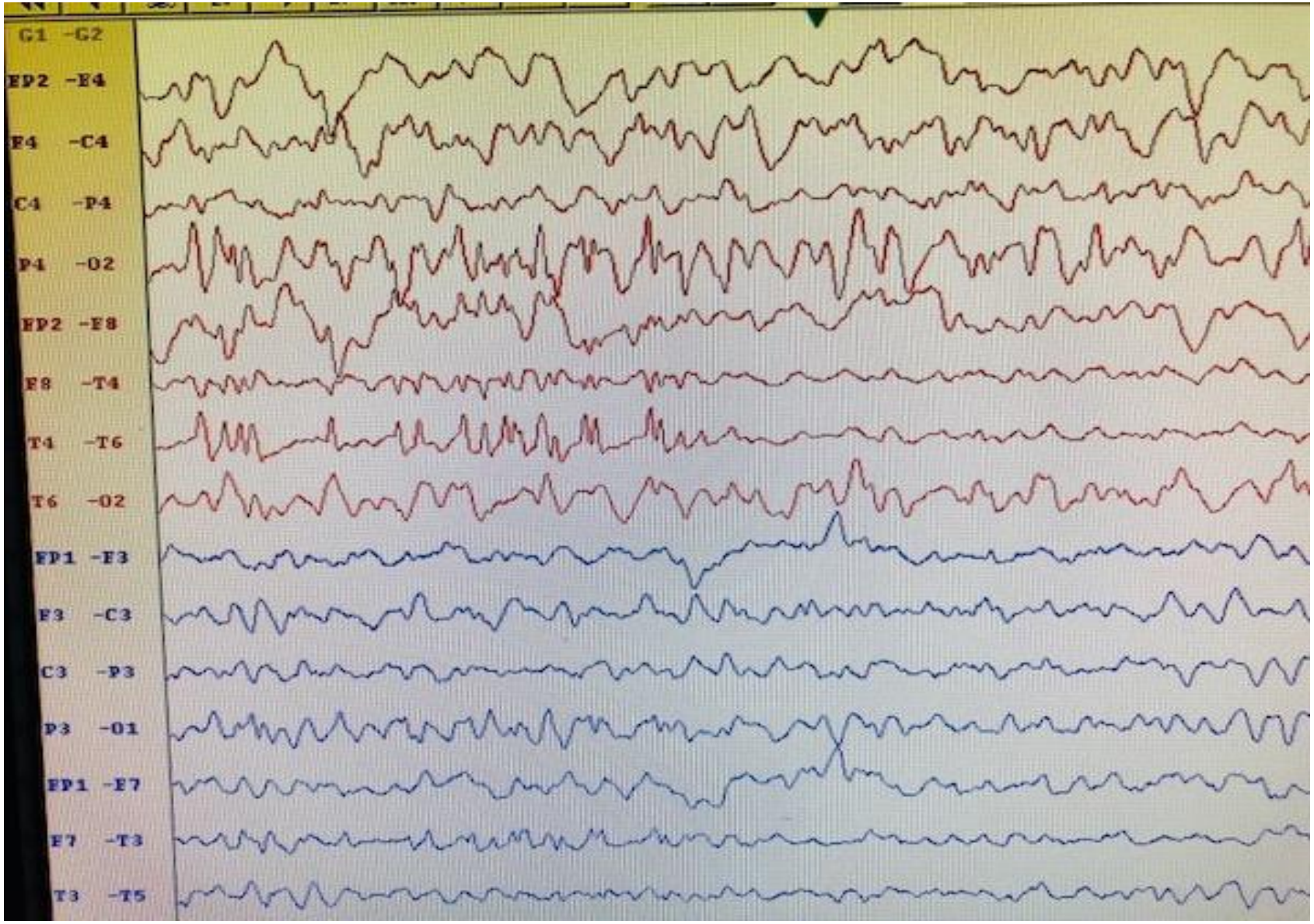




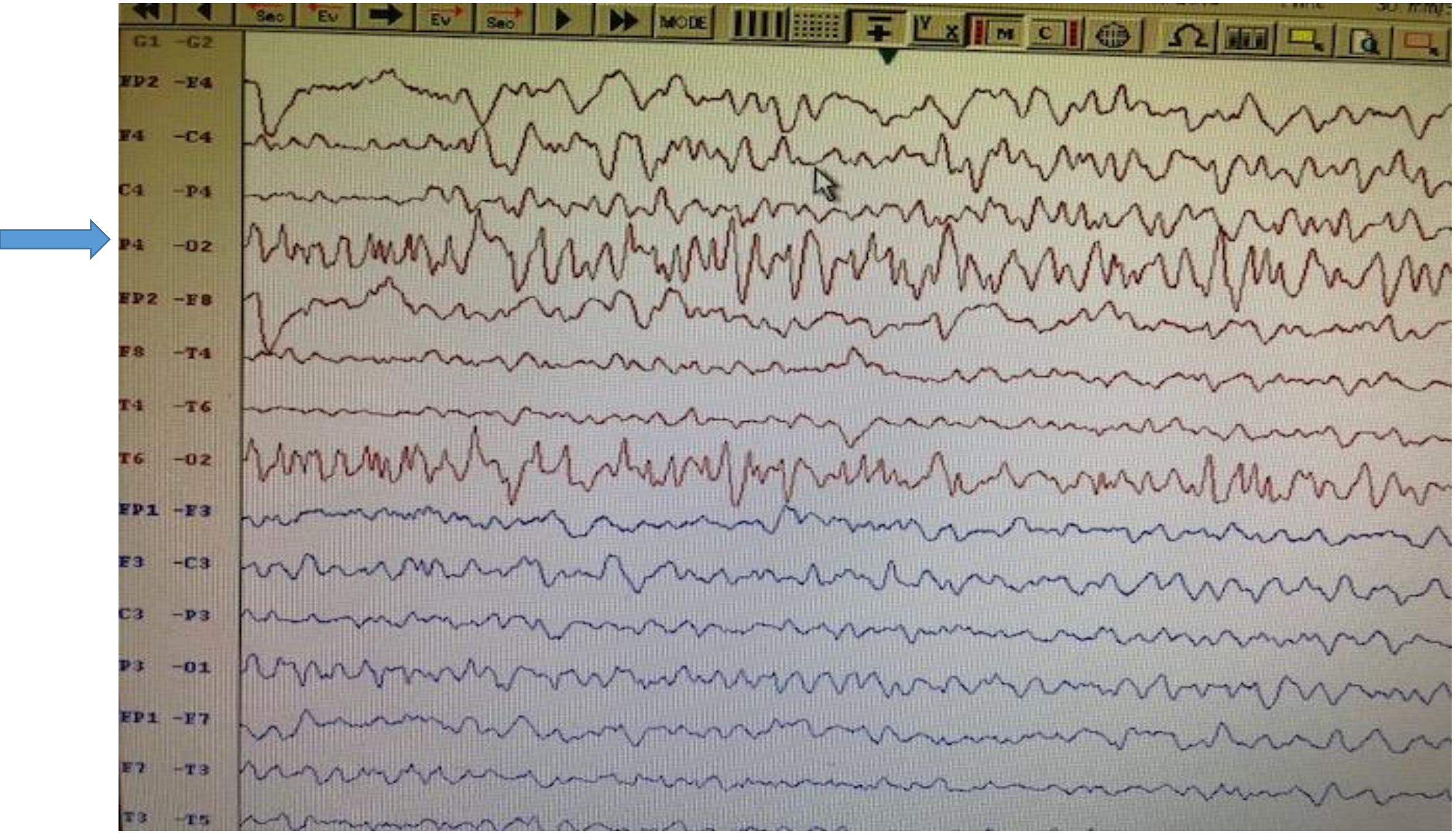




MRI- DWI showing cortical diffusion restriction in the right Parieto-occipital region . Reported as ischemic infarct



EEG -Showed Right Parieto-temporo- occipital spikes & waves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C4 -P4
P4 -O2
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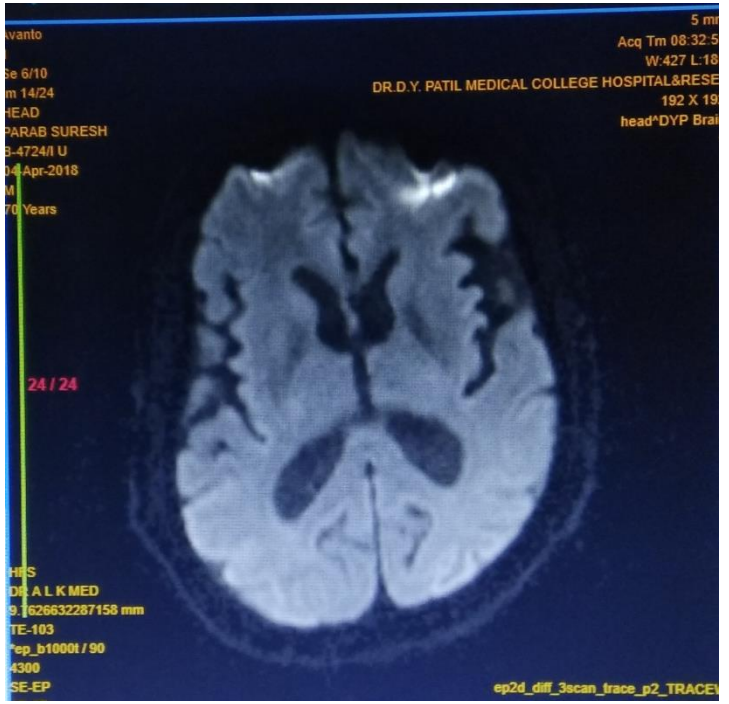
F8 -T4
T4 -T6
T6 -O2
FP1 -F3
F3 -C3
C3 -P3
P3 -O1
FP1 -F7
F7 -T3
T3 -T5

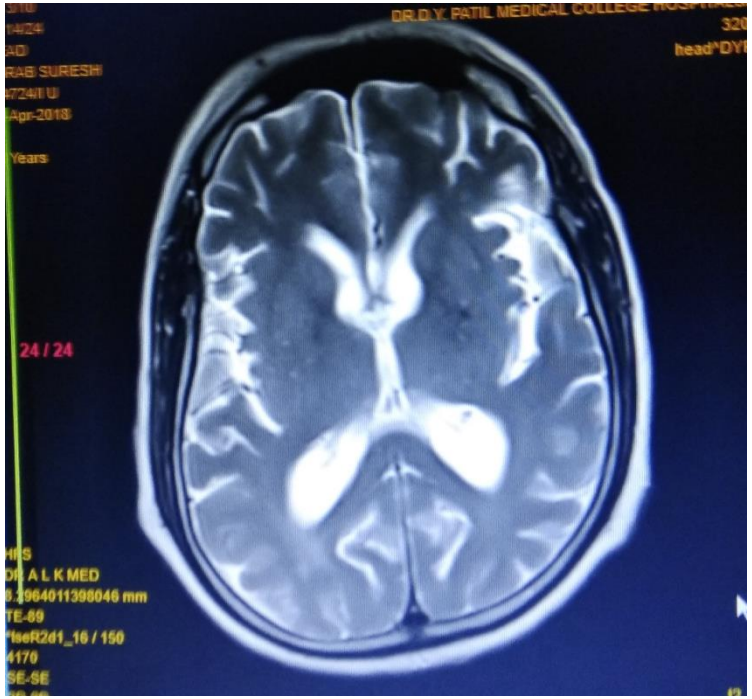
Investigations

- Biochemical and metabolic profile was normal.
- Repeat MRI done after one month was normal suggesting possibility of epileptic focus .

Diagnosis-Isolated Epileptic nystagmus

Patient asymptomatic after giving Levitiracetam





- **Isolated Epileptic nystagmus** is defined as a quick, repetitive jerky movement of the eyeball associated with seizure activity without any evidence of Clinical seizures
- A number of different cortical regions could induce EN. However, cases of EN due to ictal discharge from the posterior temporo-parietal-occipital region or occipital lobe have been reported .
- In addition, there is still significant controversy regarding the exact pathophysiologic mechanism of EN. .

Epileptic Nystagmus and Vertigo Associated with Bilateral Temporal and Frontal Lobe Epilepsy Kyu-Sung Kim et al. Clin Exp Otorhinolaryngol. 2013 Dec; 6(4): 259–262.

- Clinically, epilepsy associated with simultaneous ictal discharge from multiple cortical lesions is not uncommon. In cases of IEN associated with this multiple discharge, localization of the exact epileptogenic zone inducing IEN could be difficult.
- Literature review till 2014 revealed approximately 45 reported cases in literature

- Etiological factors - Trauma, cerebral vascular disease, tumour and anoxia.
- Frequency of IEN varies from several to hundreds of times per day, and the duration of it is usually less than 1 minute. IEN and its subtypes, such as epileptic monocular nystagmus, vertical epileptic nystagmus, epileptic skew deviation, periodic alternating nystagmus, and partial oculo-clonic status, are rare

Case series of Ophthalmoplegia case-2

- 30 yr old housewife
- Presented with h/o moderate to severe throbbing headache in left orbital and supraorbital region- 3 days
- Developed drooping of left eye lid- 2 days
- No h/o fever, nausea, vomiting, photophobia/sonophobia, diurnal variation

- No h/o drooping of other eye lid
- No past h/o headaches, drooping of eye lid. Weakness in extremities
- No significant past history
- O/E- patient had left 3rd n external ophthalmoplegia with ptosis and abduction of left eye at rest. Pupils BERTL
- No other cranial nerve deficit or neurological deficit

- Routine hematological and biochemical tests were normal.
- ANA- ve
- MRI brain (plain) normal
- **Diagnosis- Ophthalmoplegic migraine**

  OR Inflammatory cranial neuropathy
- Treated with short course of steroids with full recovery

Case-3

- 50 yr old lady presented with similar complaints of throbbing headache since 3 days followed by double vision , more on looking towards left side . No h/o diabetes
- O/E -had left 6th nerve palsy. Biochemical Parameters, Plain MRI brain was normal

Case-4

- 40 yr old lady presented with Right sided throbbing headache for 1 day followed by double vision mainly on looking towards left side

- O/E- she had Right IO palsy (partial 3rd nerve)
- Haematological, biochemical parameters and MRI brain (plain) were normal

- **Ophthalmoplegic migraine** is a rare condition, previously thought to represent a variant of migraine. Recently International headache society has included it in inflammatory cranial neuropathy.
- In a large study the median age at the time of the first ophthalmoplegic migraine attack was 8 years (3–16 years) and ranged from 7 months to 50 years.
- The third cranial nerve was involved in 83% , The sixth cranial nerve was involved in 20% of cases . The fourth nerve was only involved in 2% of cases

• In three-quarters of the cases involving the third nerve, there is focal nerve thickening and contrast enhancement on MRI.

• Systemic corticosteroids may be beneficial acutely.

• The etiology remains unclear, but may involve recurrent bouts of demyelination of the occulomotor nerve.

- The pain is migrainous in 68% and not migrainous in 32%
- Interval between headache onset and ophthalmoparesis ranged from immediate to up to 14 days
- Other causes should be excluded like tolosa hunt syndrome and cavernous sinus pathologies

Case 5

- 45 yr old lady was recently diagnosed as a case of type 2 DM
- She Was being managed on OHAs
- Reported with c/o
- Double vision – 2 mths. Insidious onset and progressive
- Throbbing headache in rt frontal and orbital region-1 month
- Numbness over right forehead- 1 month
- Double vision was mostly on looking towards rt side

- There was no h/o decreased vision, diurnal variation
- O/E- no chemosis or proptosis
- She had rt 6^{th} nerve palsy
- Pupils were BERTL. 3^{rd} & 4^{th} Cranial nerves normal
- There was decreased sensation of touch and pain over rt forehead
- Initially thought to have diabetic 6th nerve palsy

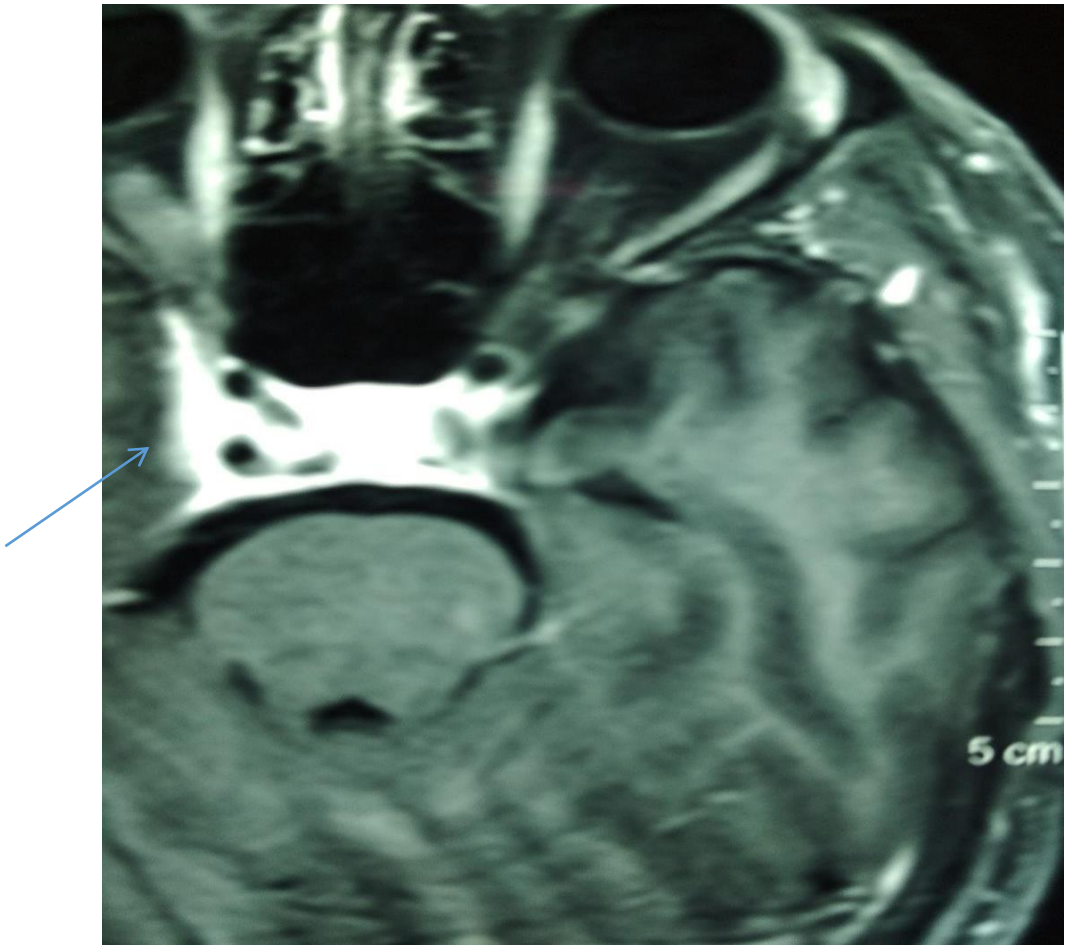
- Blood sugar F- 116 mg%

  PP- 167 mg%

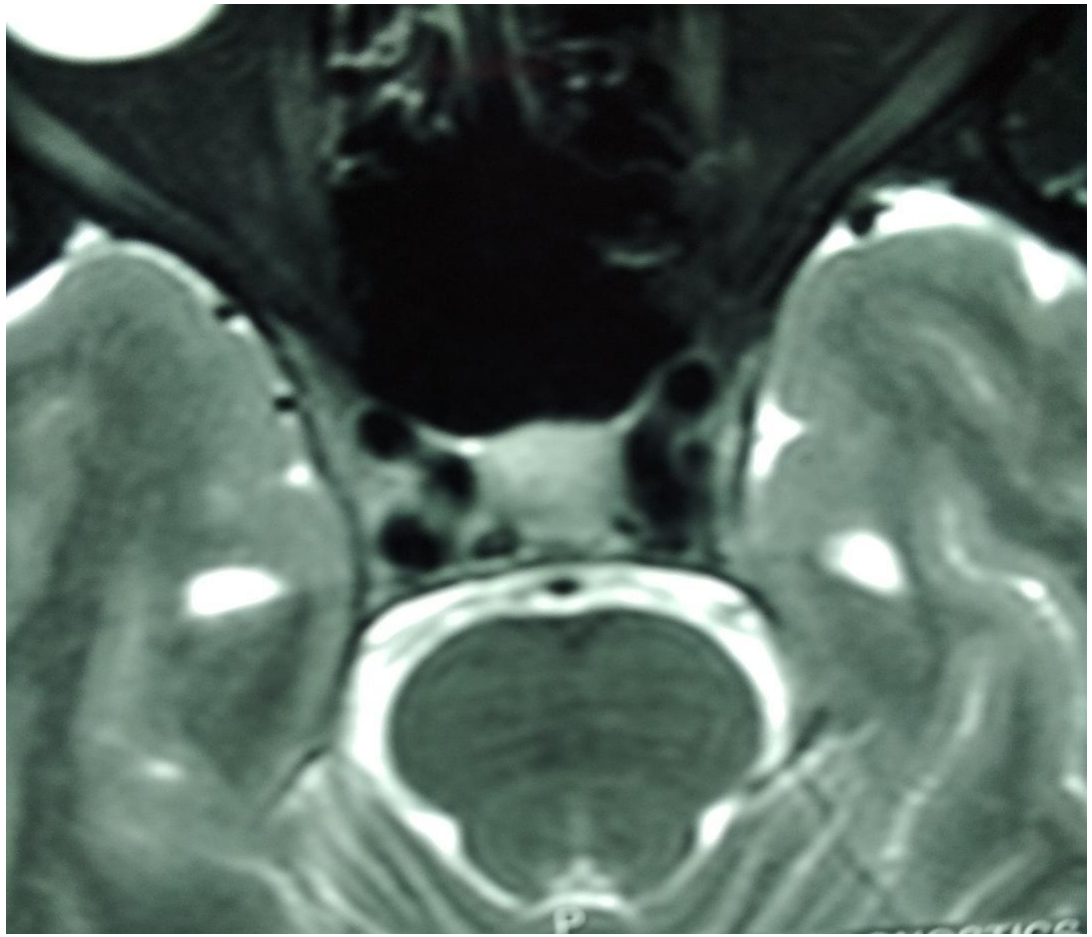
HbA1c- 6.9 %

MRI brain-

MRI



T1 contrast



T2

Diagnosis- TOLOSA-HUNT syndrome

Started on steroids a week back

Patients pain is less but diplopia persists

Case-6

- 42/Male
- C/o-

Right orbital and frontal headache since one and half year

-Daily, continuous, deep seated retro-orbital pain with nausea sometimes

- No other medical illness
- MRI Brain Plain (14/10/16) No films available- Reported normal
- Treated for migraine without much relief

- Right eye ptosis- Aug 2017
- No other Cranial nerve/ CNS deficit
- Repeat MRI Brain Plain in Aug 2017 reported as normal.
- Developed right eye blurred vision in Sept 2017
- Treated with IV MPS for 5 days outside
- Ptosis and headache improved completely;
- Vision had partial improvement
- Post discharge, had gradual recurrence of headache

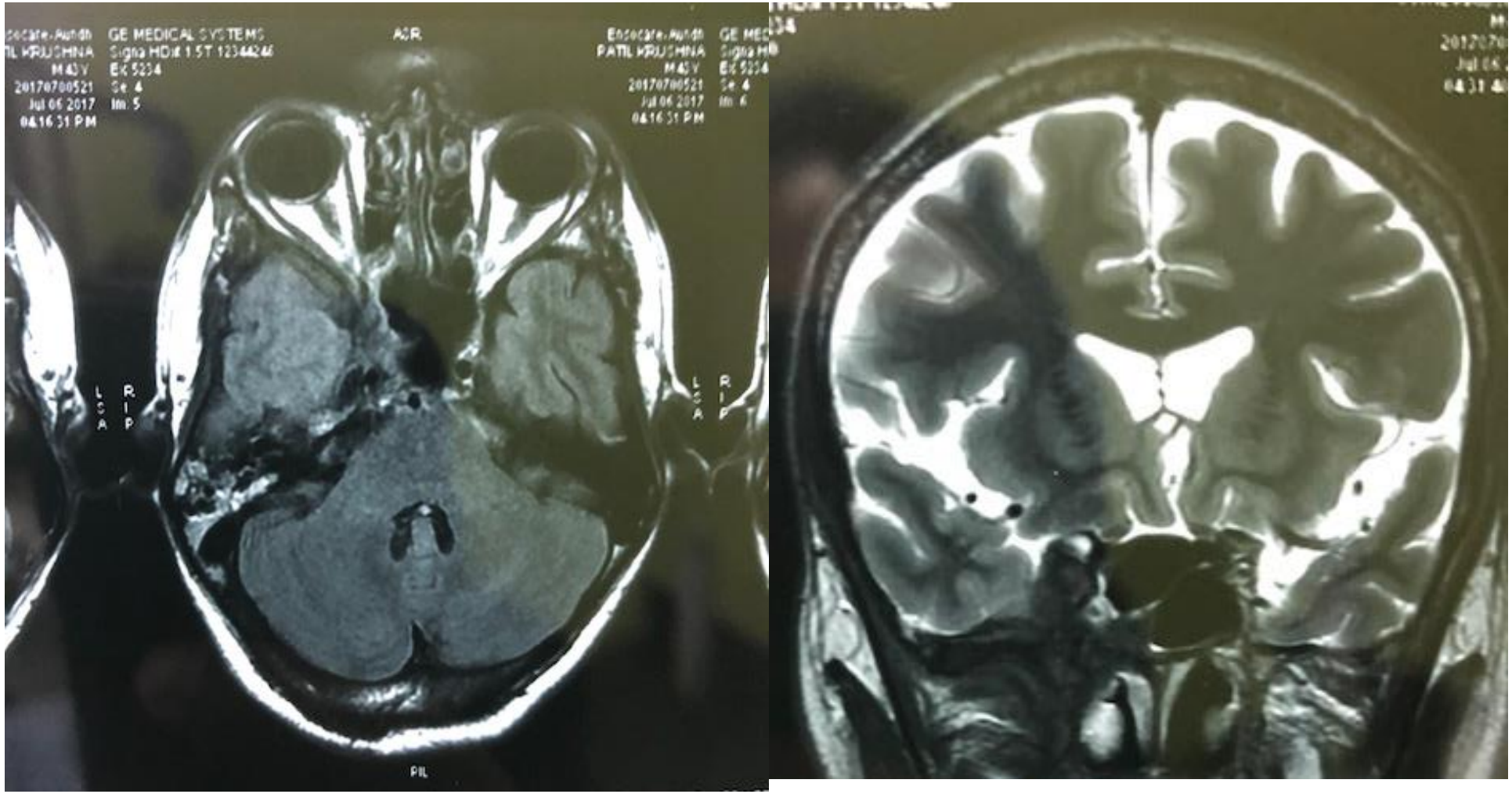
Reported to our neurology OPD in Dec 2017

- Worsening headache in Dec 2017

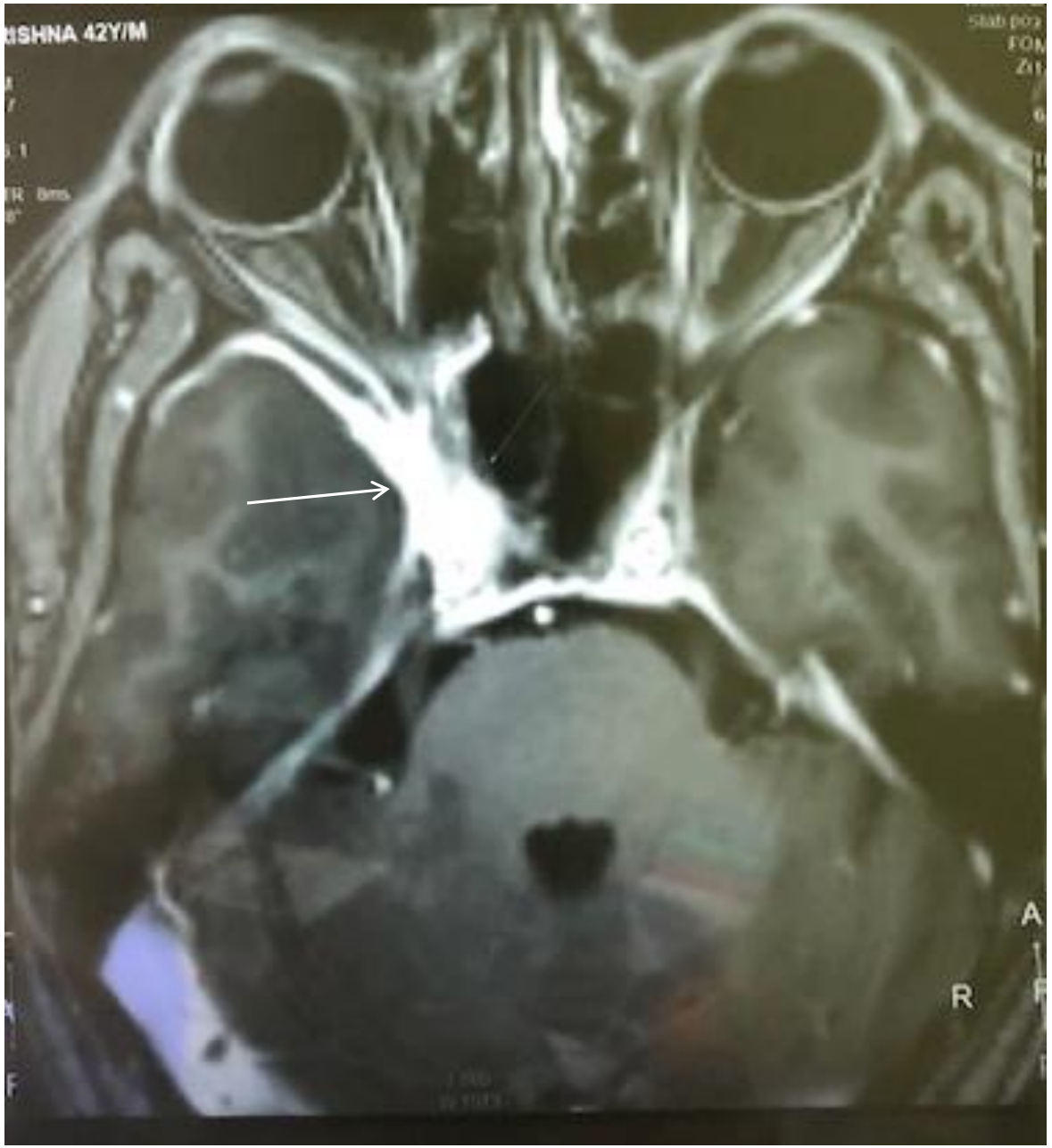
O/E:

- Poor Rt visual acuity
- Rt RAPD
- Rt disc pallor
- Rt V1 decreased sensation
- No other deficit
- Previous MRI were reviewed & 3T MRI was done with contrast

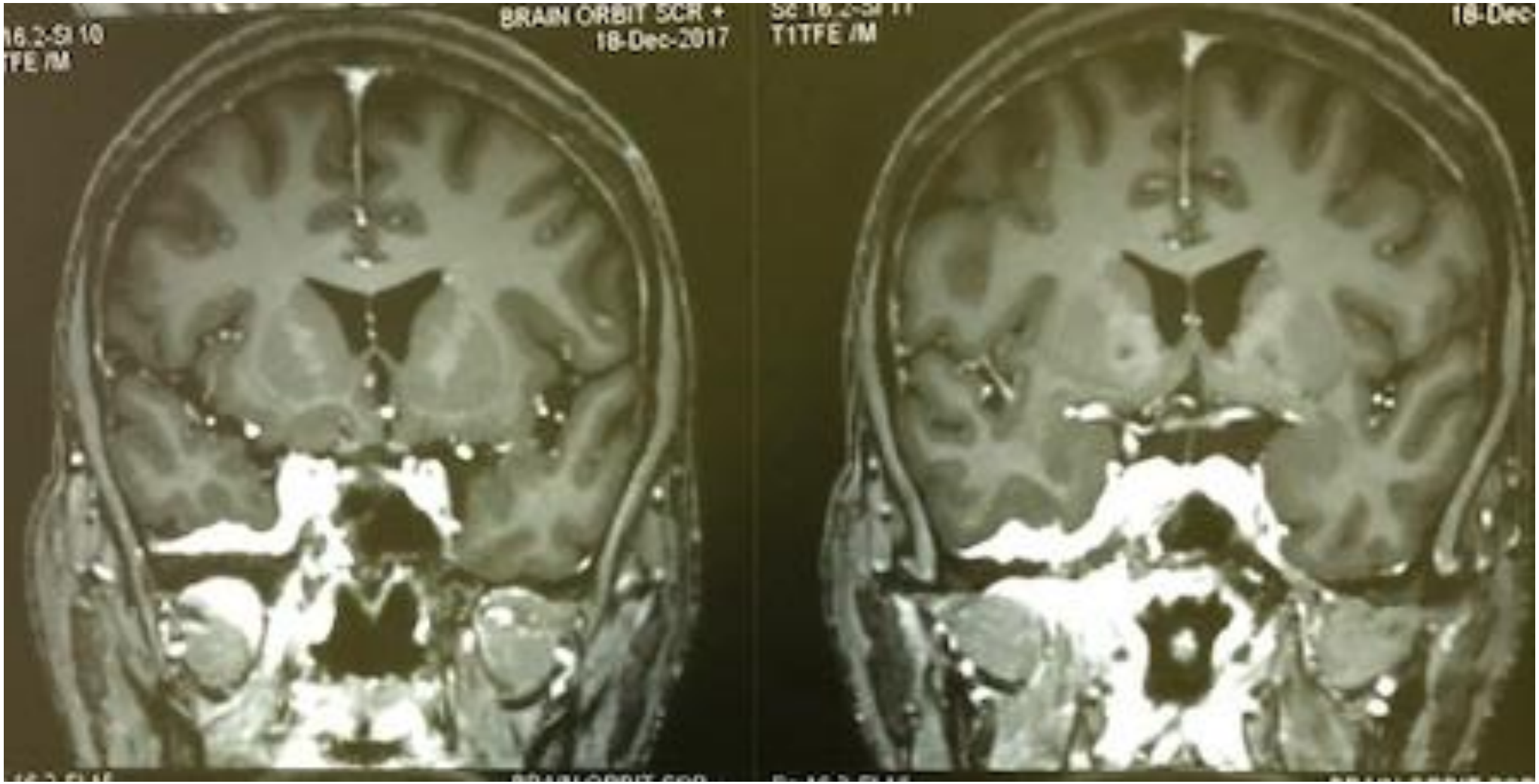
MRI Brain-Aug 2017



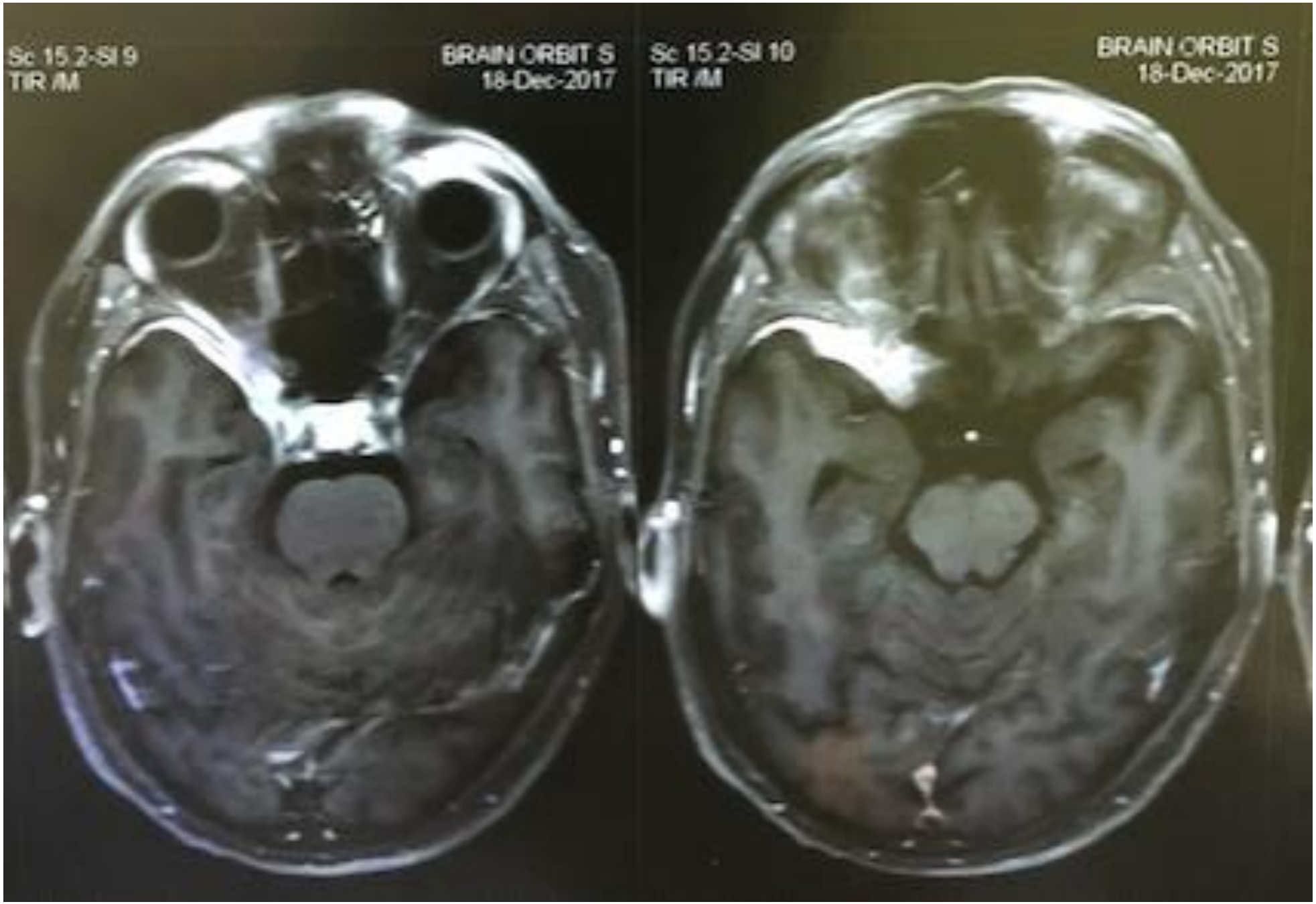
MRI brain reported as normal but on review there was a lesion in Rt Cavernous Sinus extending up to orbital apex



3 TESLA CE MRI



3 TESLA CE MRI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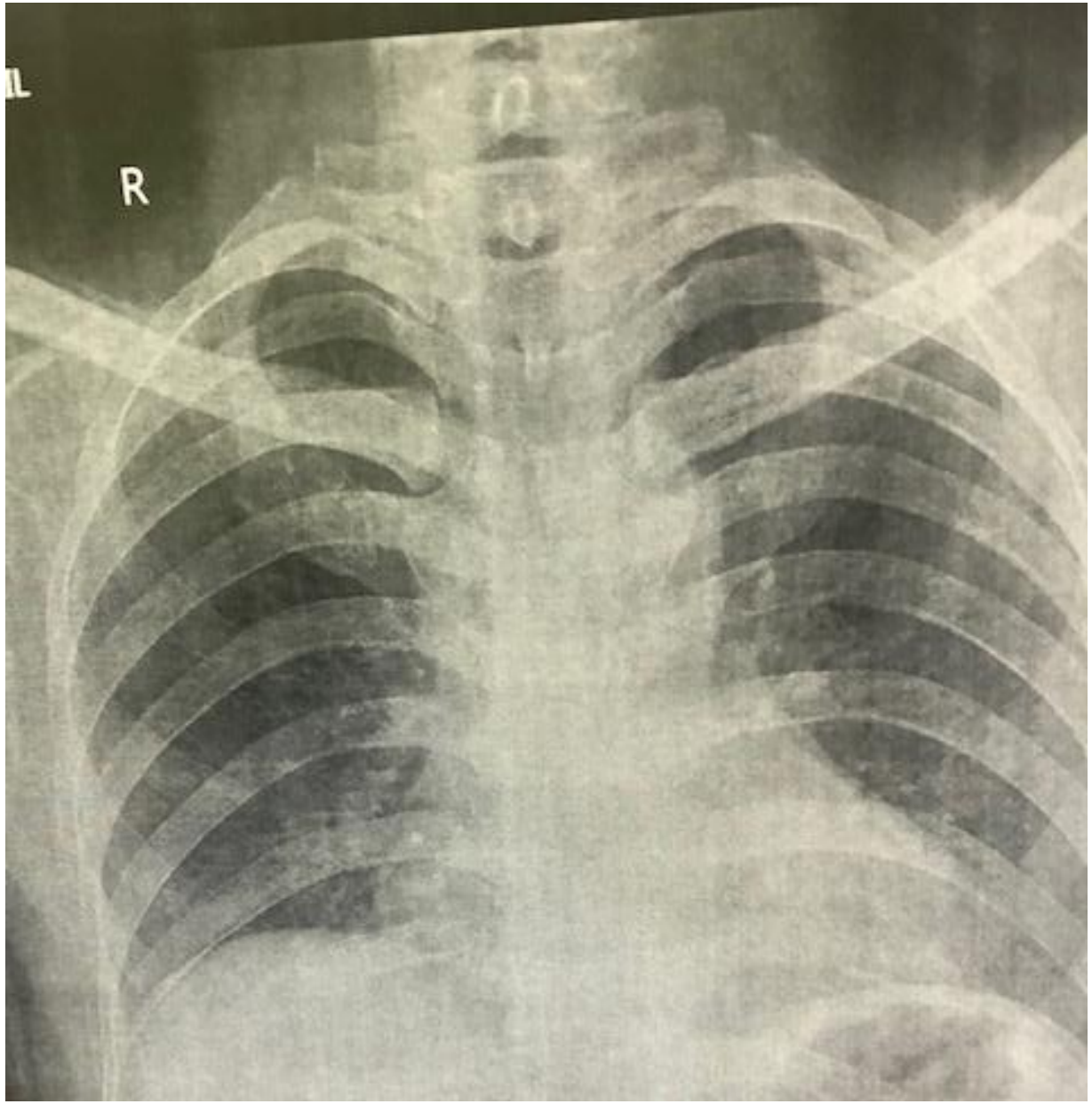
18-Dec-2017
Sc 15 2-SI 10
TIR /M
BRAIN ORBIT S
18-Dec-2017

- Routine lab- normal
- CSF- WNL
- CSF- TB PCR- Negative
- S ACE level – 340 (8-52U/L)
- **Biopsy** – from right temporal bone was showing fibro-sclerotic tissue adipose and muscle tissue. And it is negative for inflammation , atypia or malignancy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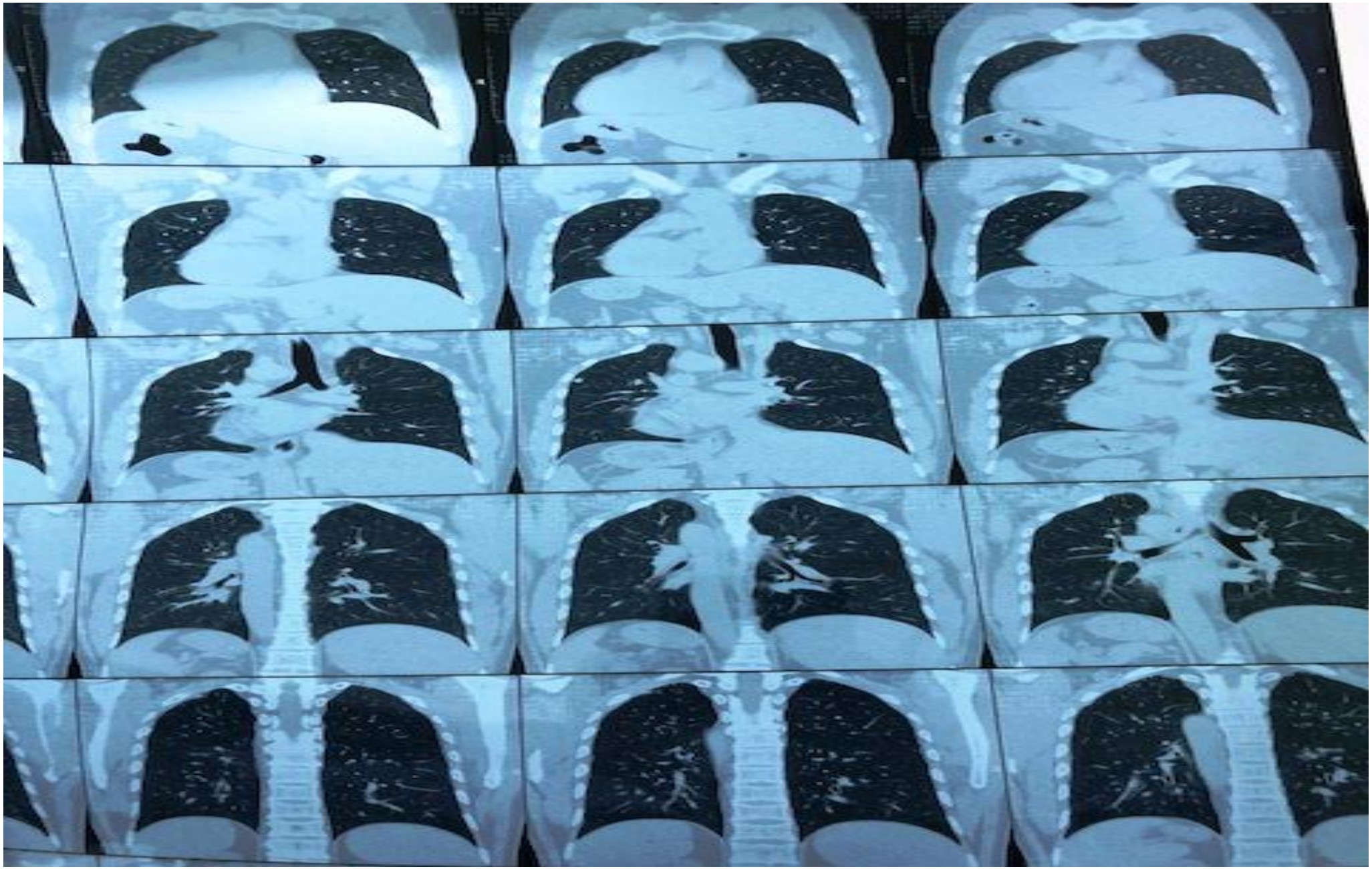


HRCT chest reported normal

- IV MPS for 5 days followed by oral steroids

And later Azathioprine was added

- Now he has Occasional mild headache
- Vision improved moderately

Diagnosis- ? Tolosa Hunt

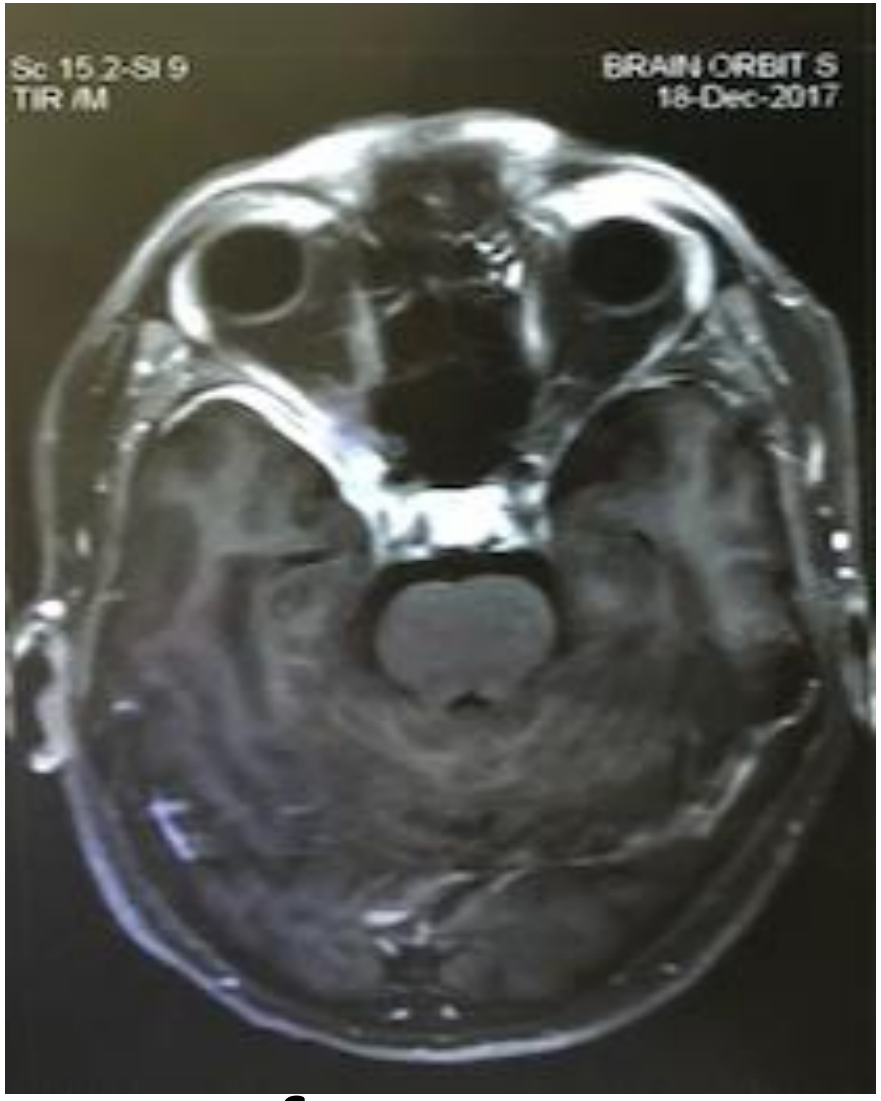
? neurosarcoidosis

✓How long to continue steroids?

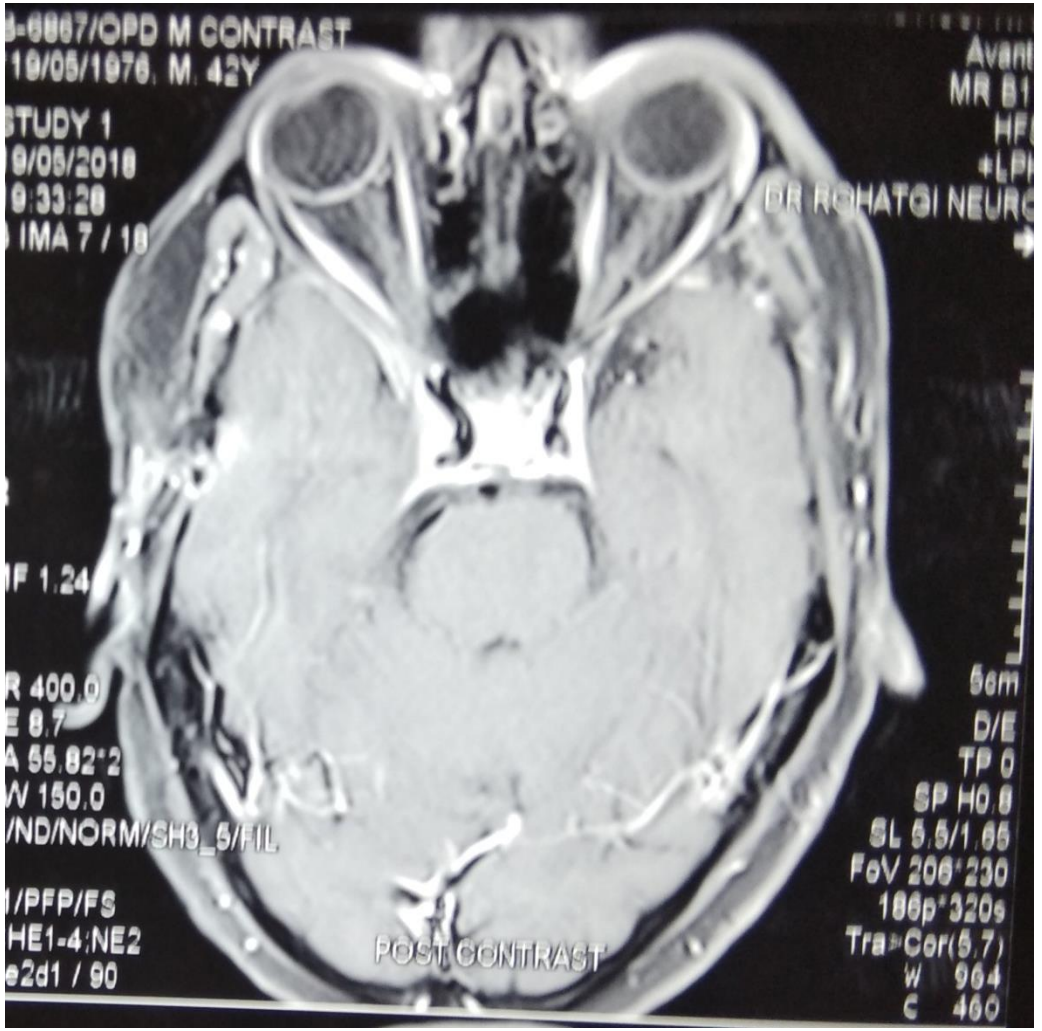
✓Whether tissue biopsy be tried again

Tolosa hunt, Lymphoma, Sarcoidosis – All respond to steroids

After 5 months of Steroid and azathioprine-mild reduction in lesion, patient is asymptomatic



Before



After

TOLOSA HUNT SYNDROME

- Tolosa-Hunt syndrome (THS) is a painful ophthalmoplegia caused by nonspecific inflammation of the cavernous sinus or superior orbital fissure.
- In 2004, the International Headache Society provided a definition of the diagnostic criteria which included granuloma, Nonspecific inflammation (noncaseating granulomatous or nongranulomatous) within the cavernous sinus or superior orbital fissure is the cause of the constant pain, which characterizes the onset of this disorder.
- Ophthalmoparesis or disordered eye movements occur when cranial nerves III, IV and VI are damaged by granulomatous inflammation

Differential diagnosis & Treatment

- D/D
- Benign and malignant tumours includng meningioma, lymphoma
- Neurosarcoidosis, tubercular granuloma(rare)
- PAN
- Biopsy -of the lesion may be required -Biopsy reveals nonspecific granulomatous or nongranulomatous inflammation
- Treatment- steroids. In refractory cases azathioprine, methotrexate and radiation may be used