KREP

2025

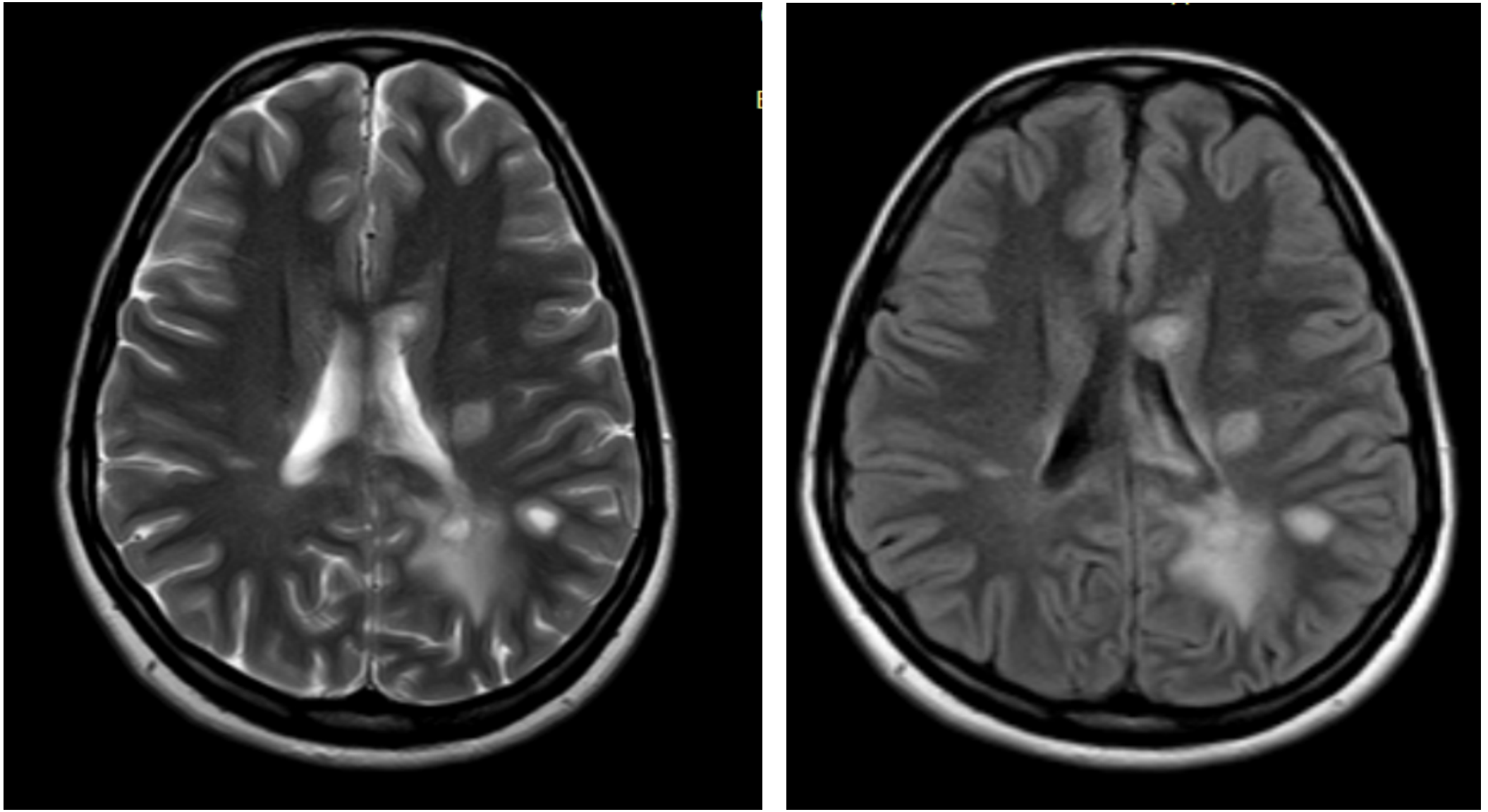
KARNATAKA RADIOLOGY EDUCATION PROGRAM

MODERATOR: Dr. Rahul S, Assistant professor, Dept. of radio-diagnosis JJMMC DAVANGERE

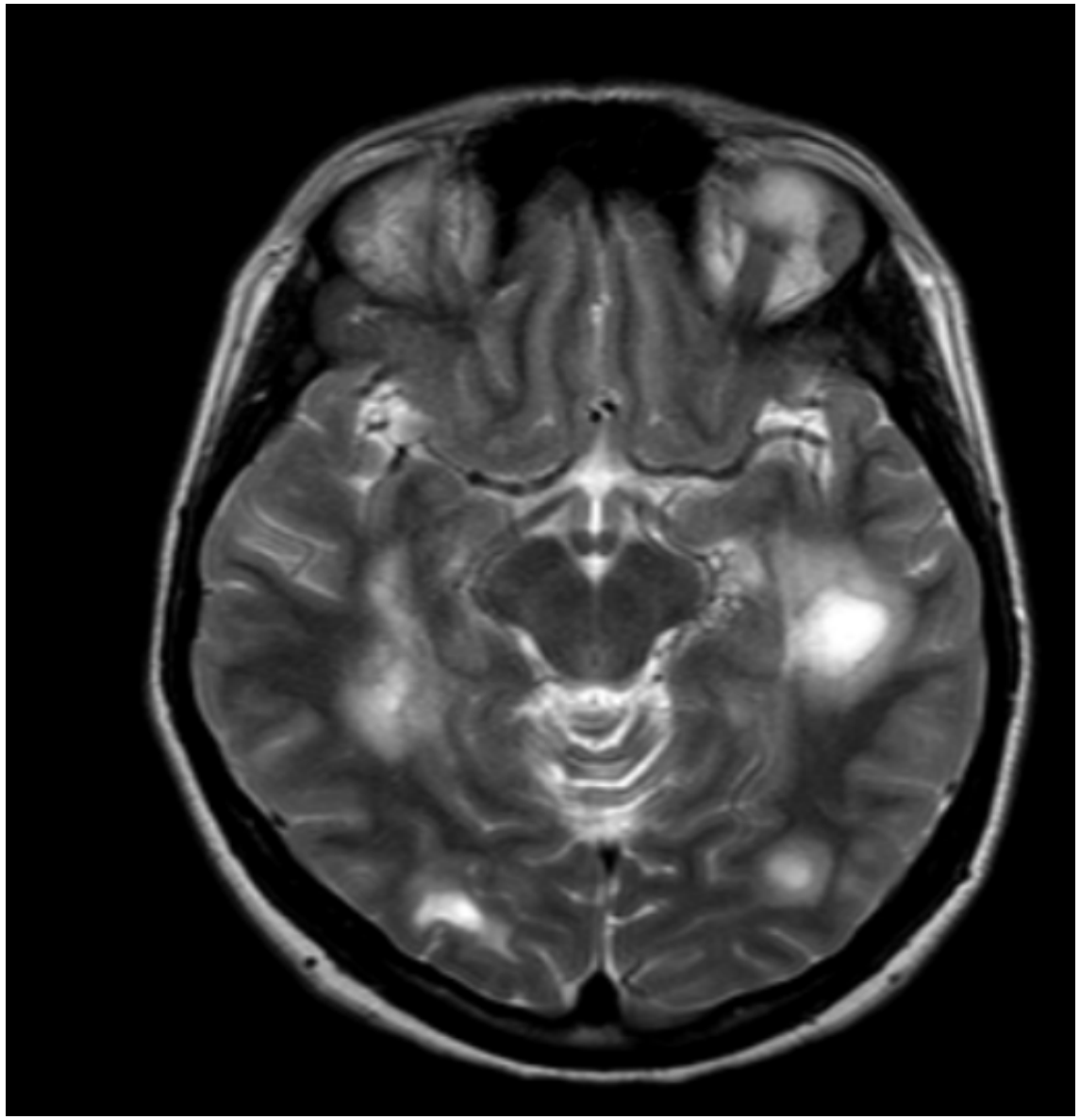
PRESENTOR: Dr Nivedita, PG resident

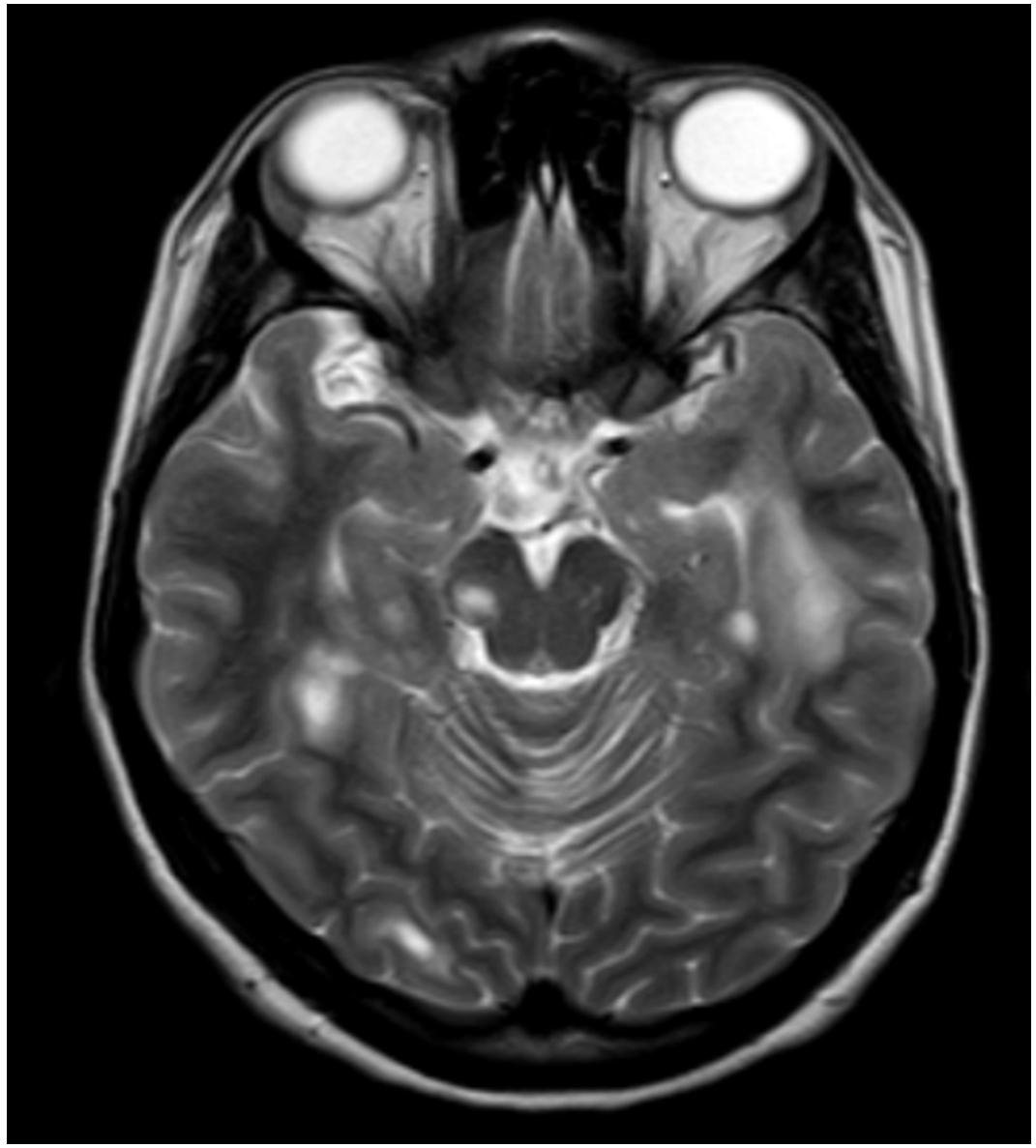
CLINICAL HISTORY

- A 25year old female patient came with:
- C/o weakness in bilateral lower limbs on walking for a month, progressive in nature.
- C/o dizziness since 2-3 weeks.
- C/o generalized weakness, poor coordination and difficulty in concentrating.
- C/o mild blurring of vision on left side, No restriction of ocular movements noted.
- No h/o fever, headache and vomiting.
- No h/o convulsions, trauma/ fall.
- No h/o previous complaints in the past, No h/o any previous hospital admission.
- No other comorbidities.

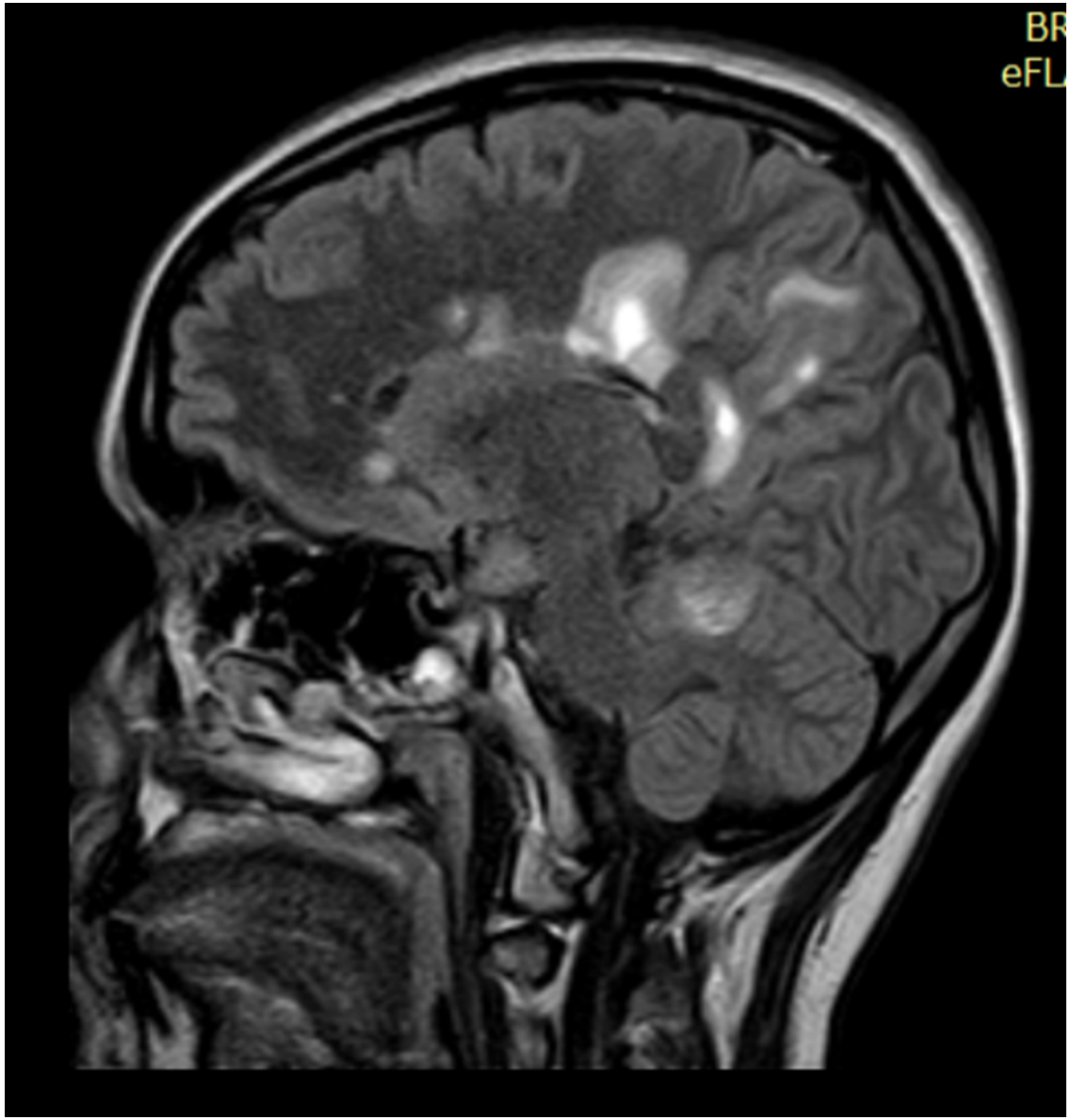


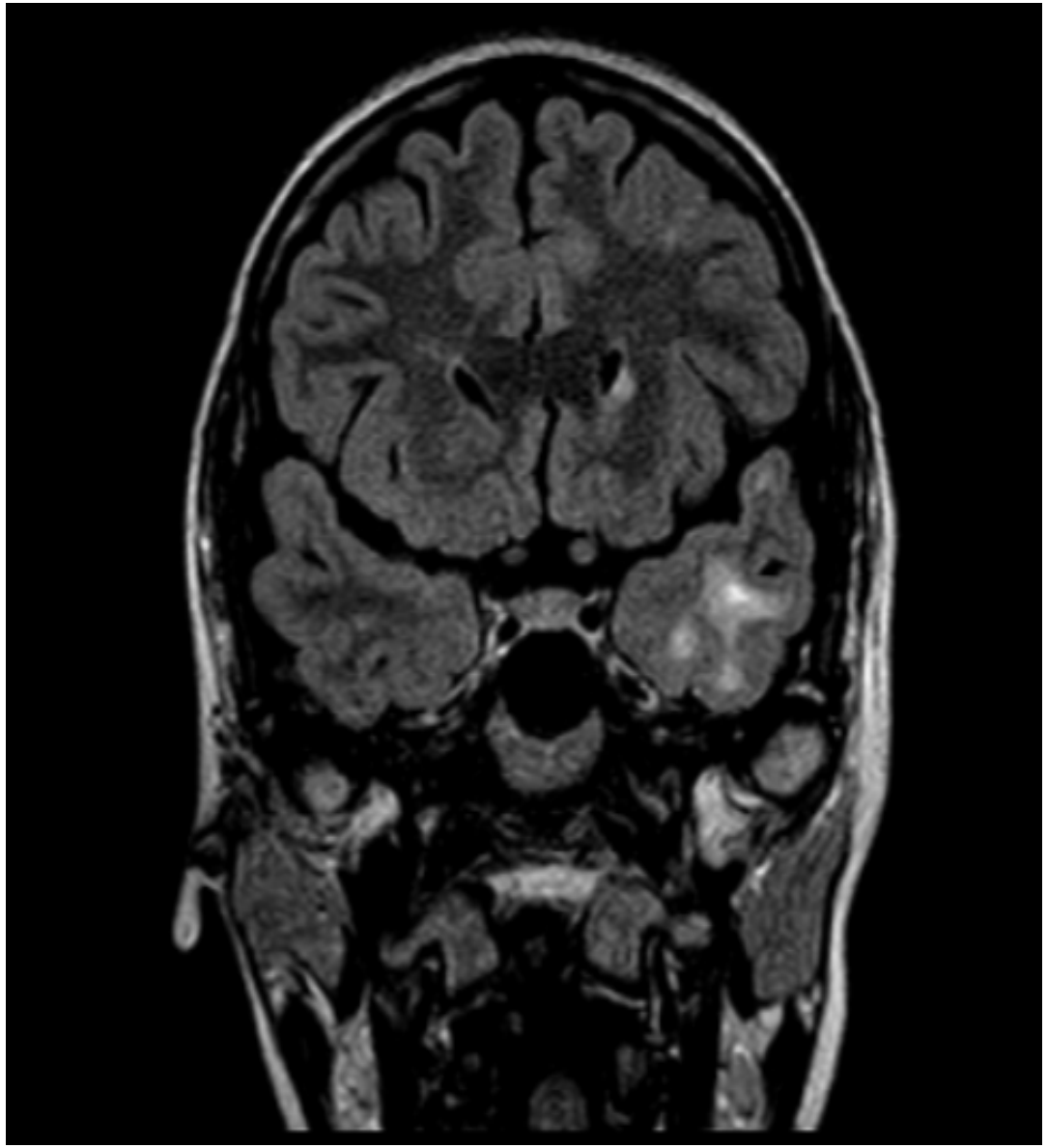
Axial sections of T2 and FLAIR with multiple T2/FLAIR hyperintense ovoid lesions, perpendicular to lateral ventricles. These lesions are noted in juxtacortical and subcortical WM.



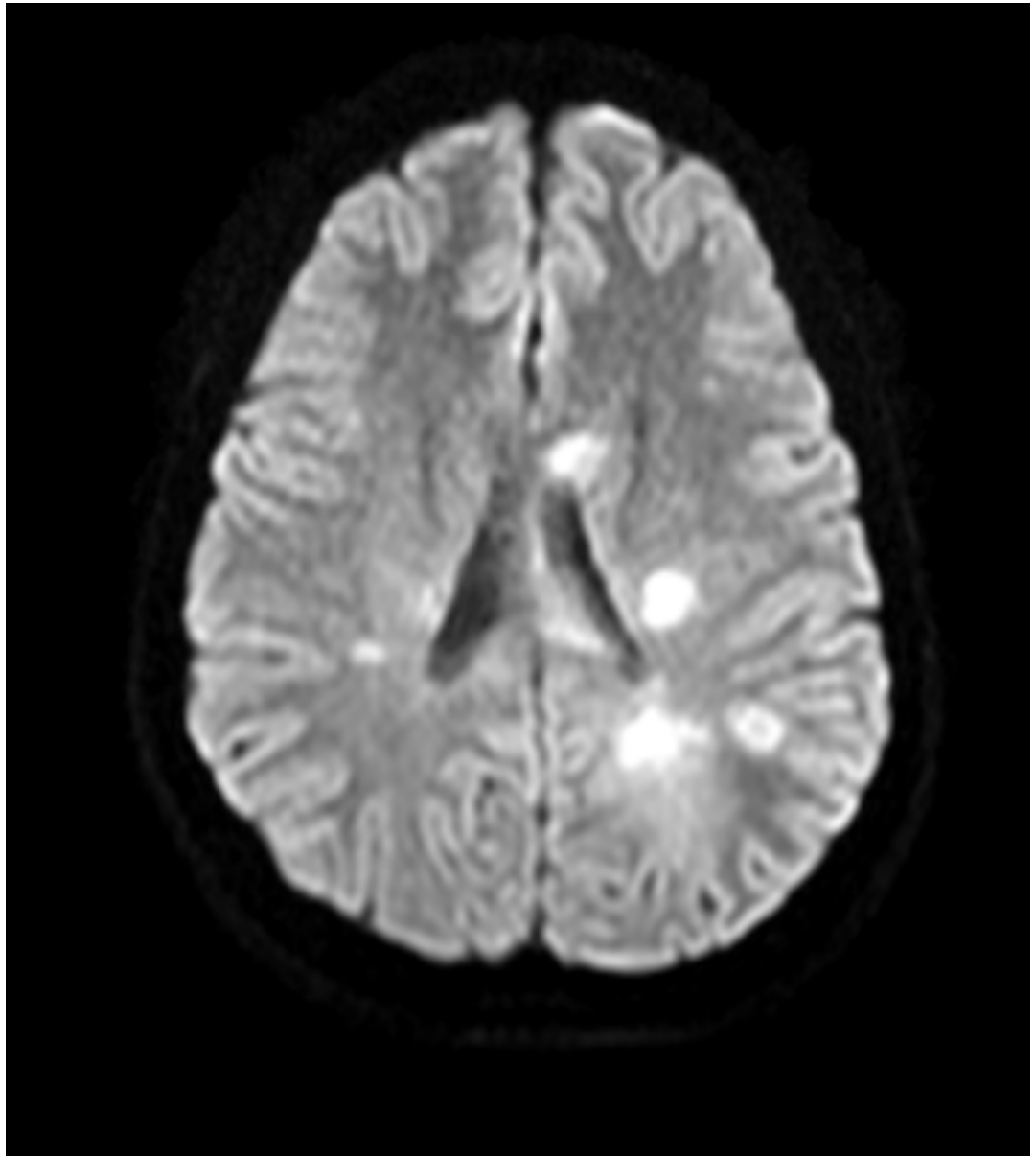


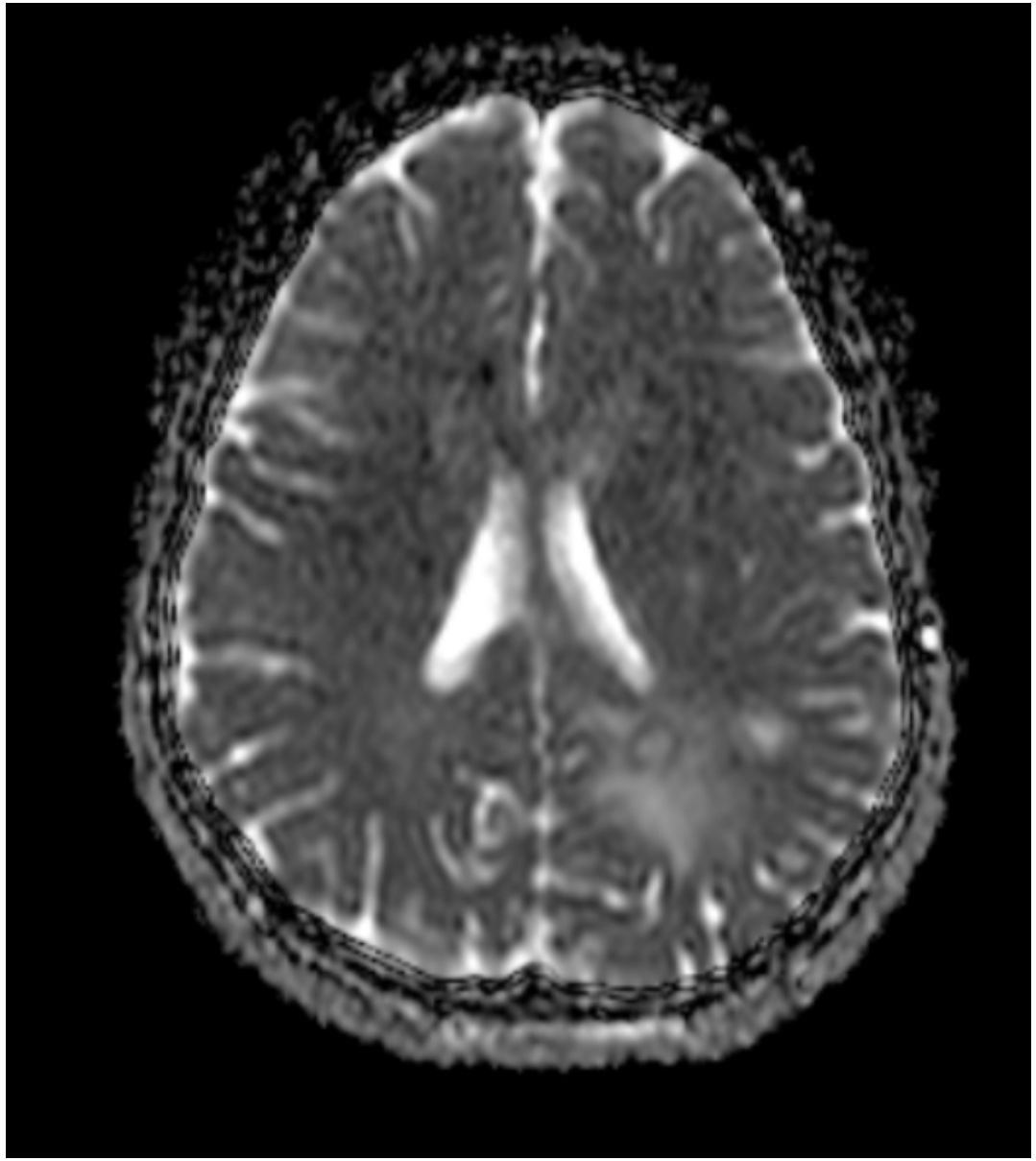
Axial sections of T2 and FLAIR with the lesions involving the temporal and occipital lobes, The lesions are located in juxtacortical WM, abutting the cortex
They are also involving the brainstem, involving the lateral aspect of right hemi-midbrain.



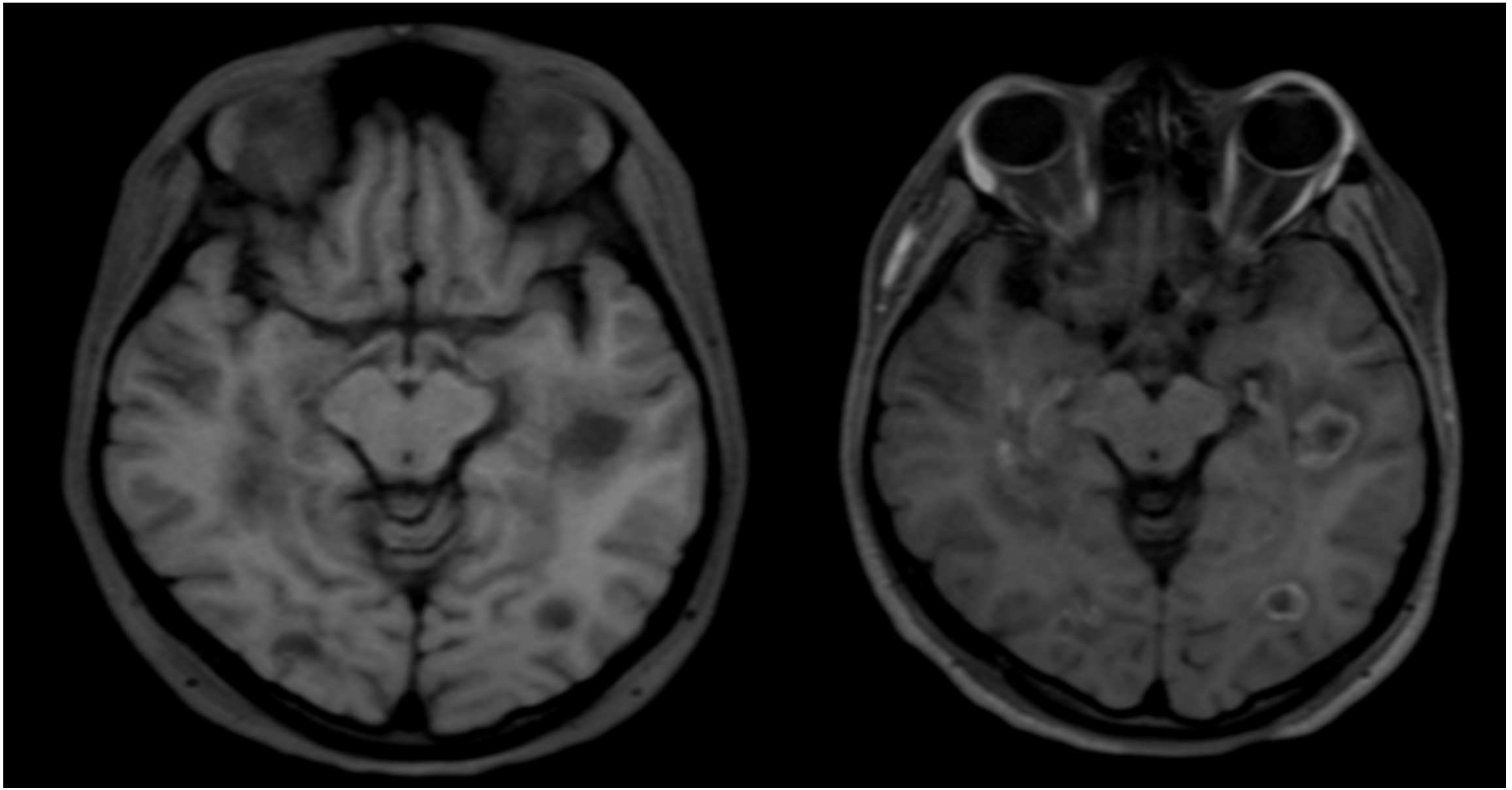


On the sag FLAIR, the lesions are located in the calloso-septal interface extending up through the corpus callosum giving a characteristic "Dawson`s fingers" appearance.
On cor FLAIR, an intracranial portion of left optic nerve appears mildly bulky without significant post-contrast enhancement.

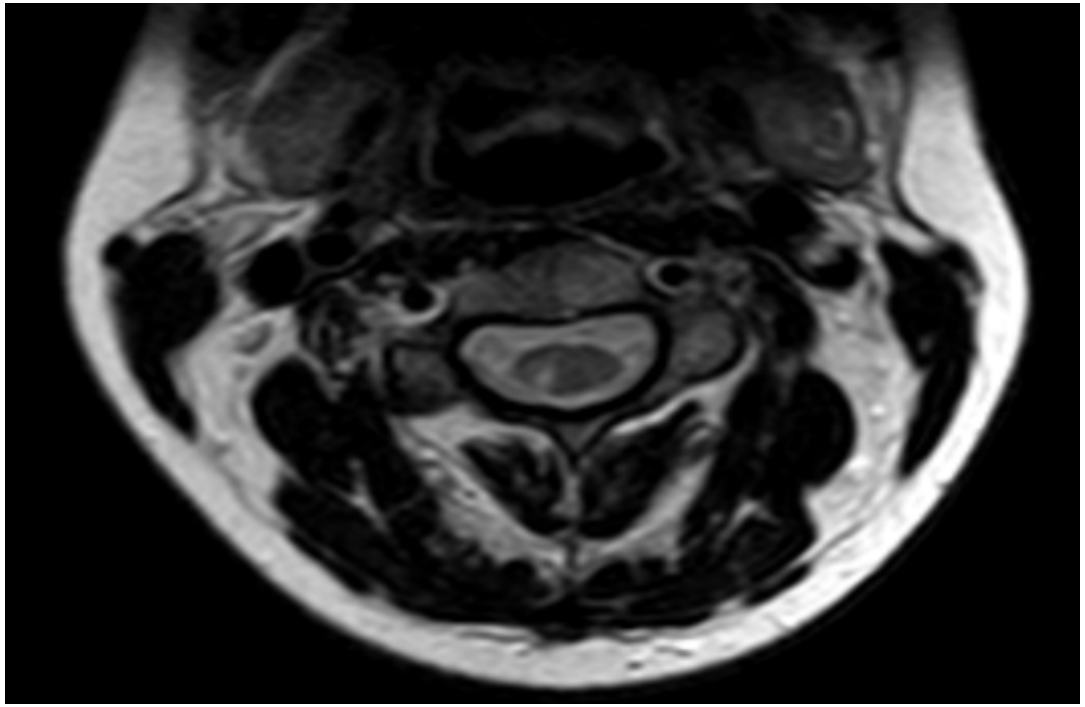




These lesions showed hyperintensity on DWI, showing T2 shine through with few lesions showing peripheral diffusion restriction



On post contrast study, these lesions show peripheral ring like enhancement.



Single T2 weighted axial image through the cervical cord demonstrates a well-defined high signal region affecting the right dorsal column at the level of C3 vertebral body
On axial section, right postero-lateral aspect of spinal cord is involved.

The thoracic and lumbar part of spinal cord appears normal.

DIAGNOSIS

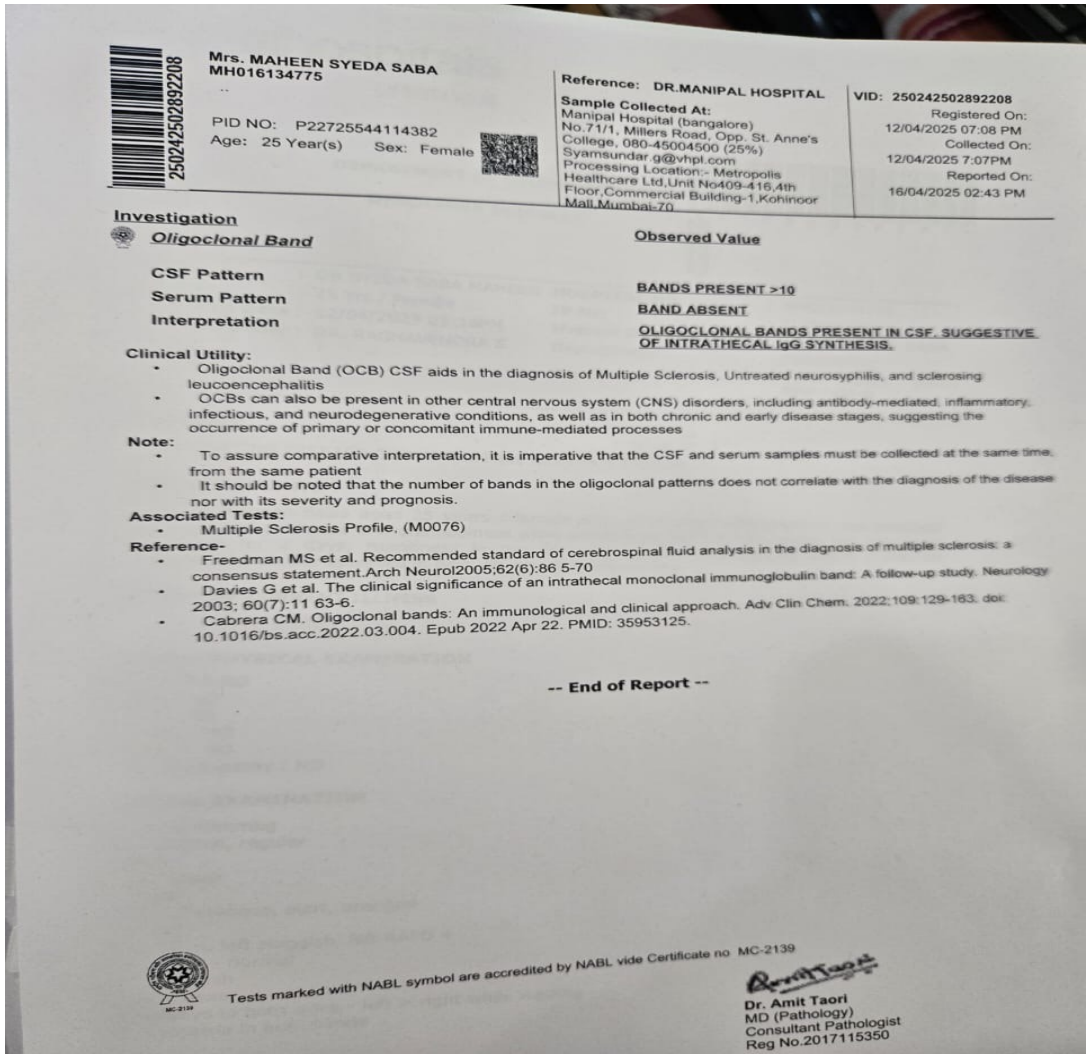
- **Multiple well-defined discrete areas of T2/FLAIR hyperintensity, correspondingly T1 hypointensity with few lesions showing peripheral rim-like enhancement on a post-contrast study involving the juxtacortical and peri-ventricular white matter of bilateral cerebral hemispheres(L>R), corpus callosum, calloso-septal interface, right hemi mid-brain, right superior and middle cerebellar peduncles and short segment of cervical part of spinal cord as described.**

- **Mild bulky intracranial portion of left optic nerve with subtle FLAIR hyperintensity without significant post-contrast enhancement- *S/o left-sided optic neuritis***

→ ***S/o Demyelinating disorder***

Multiple sclerosis (Balo-centric type)

FOLLOW UP



Mrs. MAHEEN SYEDA SABA
MH016134775

PID NO: P22725544114382
Age: 25 Year(s) Sex: Female

Reference: DR.MANIPAL HOSPITAL

Sample Collected At:
Manipal Hospital (bangalore)
No.71/1, Millers Road, Opp. St. Anne's College, 080-45004500 (25%)
Syamsundar.g@vhpl.com
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 250242502892208
Registered On: 12/04/2025 07:08 PM
Collected On: 12/04/2025 7:07PM
Reported On: 16/04/2025 02:43 PM

Investigation	Observed Value
Oligoclonal Band	
CSF Pattern	BANDS PRESENT >10
Serum Pattern	BAND ABSENT
Interpretation	OLIGOCLONAL BANDS PRESENT IN CSF, SUGGESTIVE OF INTRATHECAL IgG SYNTHESIS.

Clinical Utility:
- Oligoclonal Band (OCB) CSF aids in the diagnosis of Multiple Sclerosis, Untreated neurosyphilis, and sclerosing leucoencephalitis
- OCBs can also be present in other central nervous system (CNS) disorders, including antibody-mediated, inflammatory, infectious, and neurodegenerative conditions, as well as in both chronic and early disease stages, suggesting the occurrence of primary or concomitant immune-mediated processes

Note:
- To assure comparative interpretation, it is imperative that the CSF and serum samples must be collected at the same time, from the same patient
- It should be noted that the number of bands in the oligoclonal patterns does not correlate with the diagnosis of the disease nor with its severity and prognosis.

Associated Tests:
- Multiple Sclerosis Profile, (M0076)

Reference-
- Freedman MS et al. Recommended standard of cerebrospinal fluid analysis in the diagnosis of multiple sclerosis: a consensus statement.Arch Neurol2005;62(6):86 5-70
- Davies G et al. The clinical significance of an intrathecal monoclonal immunoglobulin band: A follow-up study. Neurology 2003; 60(7):11 63-6.
- Cabrera CM. Oligoclonal bands: An immunological and clinical approach. Adv Clin Chem. 2022;109:129-163. doi: 10.1016/bs.acc.2022.03.004. Epub 2022 Apr 22. PMID: 35953125.

-- End of Report --

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

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THANK YOU