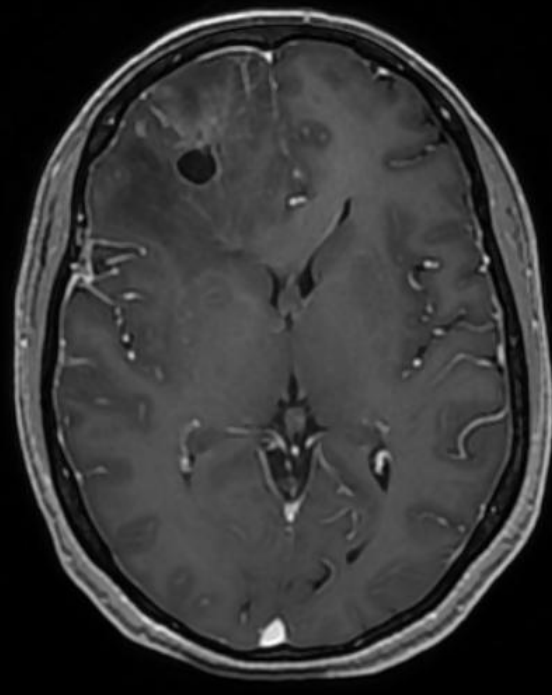
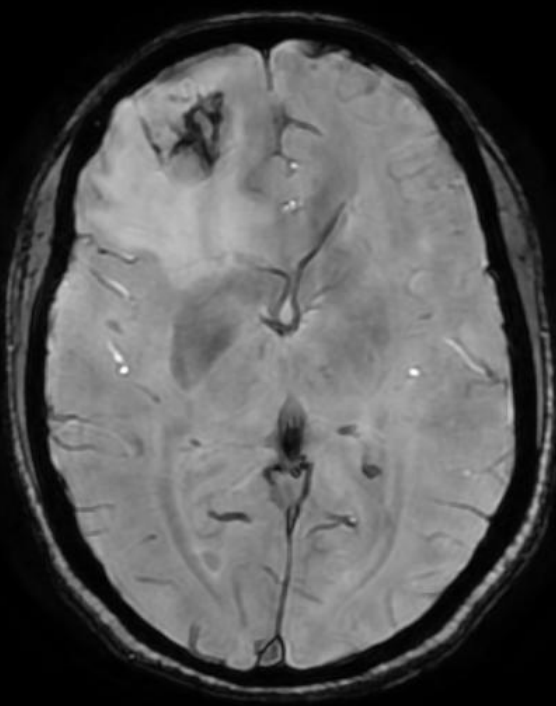
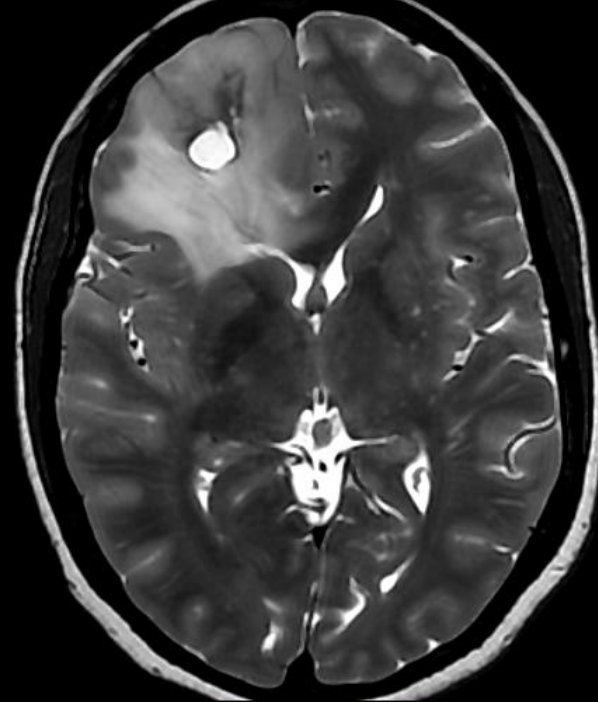
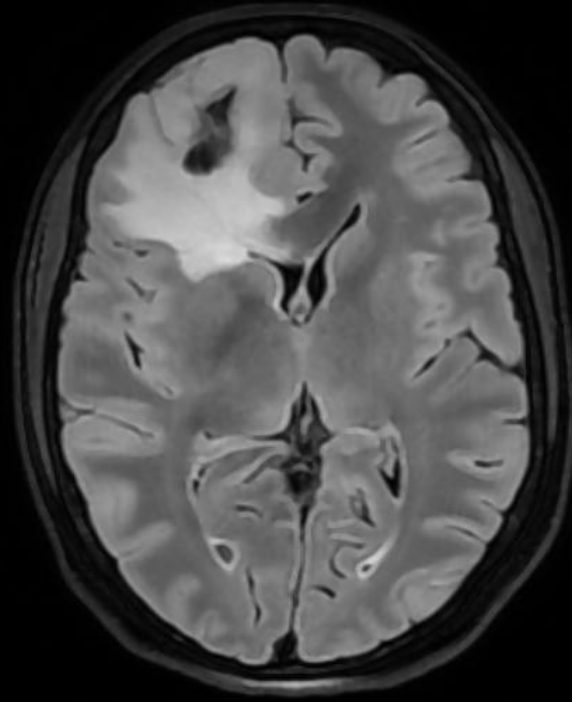
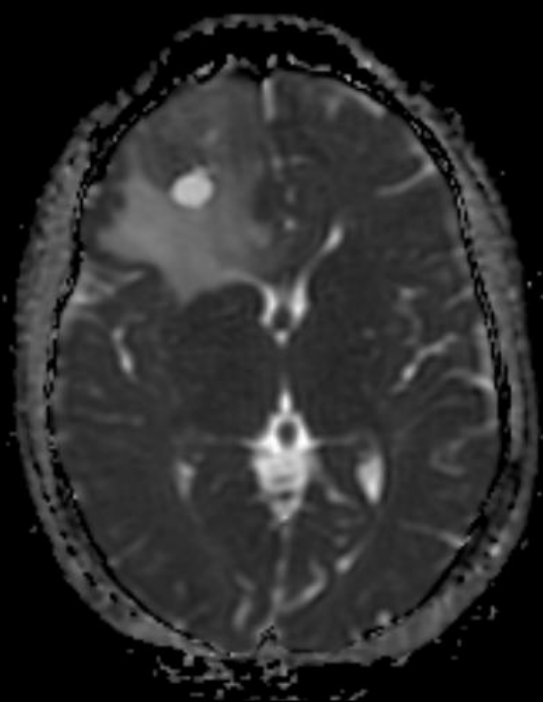




2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

SJMCH, Bengaluru
Contributor of the Series



DFOV 8.8 x 6.9 cm

Ex: Jul 29 2025

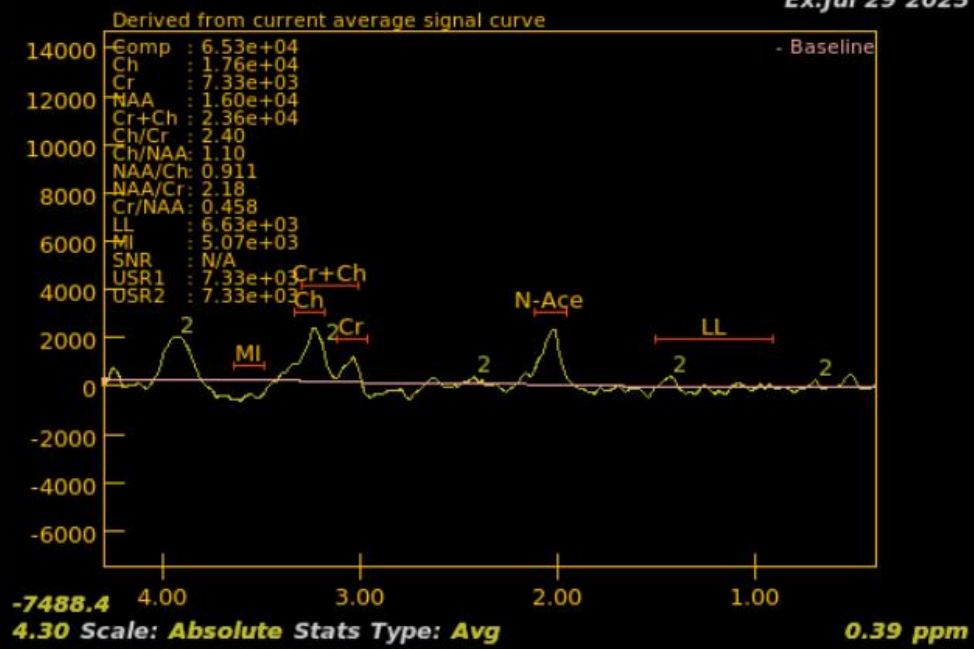
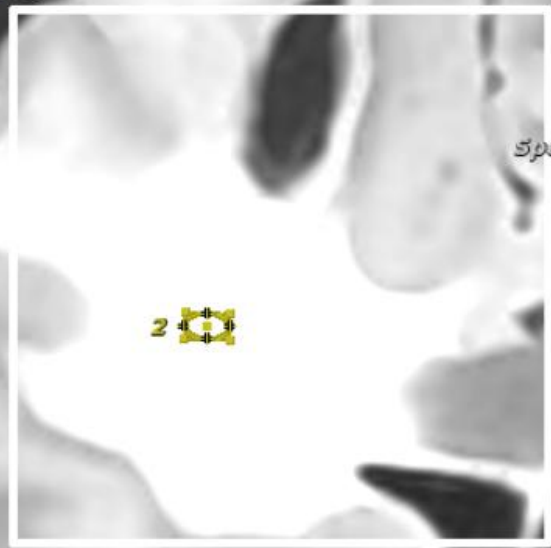
R
6
2

L
2
6

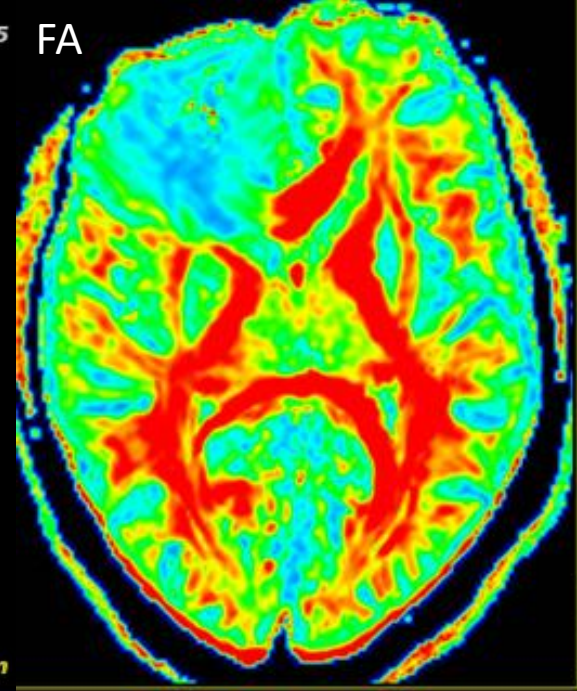
Spectro series: 15

M3D/Cubert2fair
0.90/1.8mm /0.90sp
W = 1970 L = 662

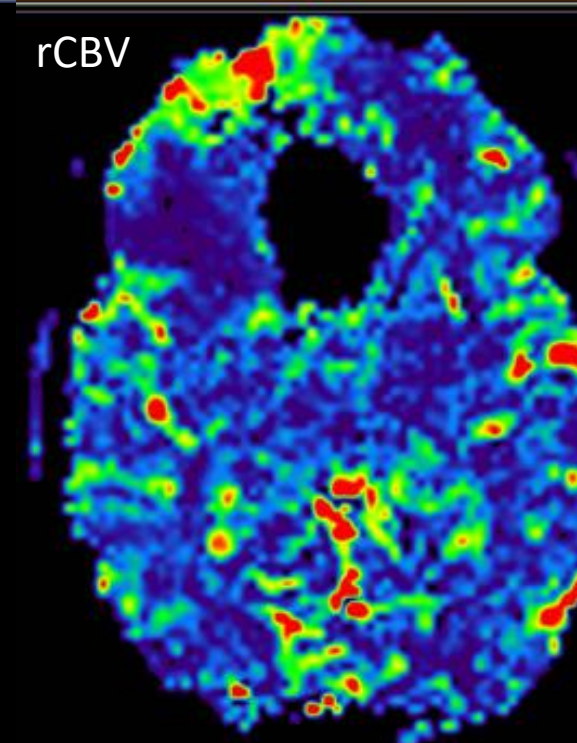
P 11



Ex: Jul 29 2025 FA



rCBV



45 year old female
Diagnosis?

- Right frontal lobe SOL with moderate perifocal edema showing T2/FLAIR hyperintense signal without mismatch, few cystic areas, gray-white junction calcifications, mild ill-defined enhancement. The lesion is reaching right frontal periventricular region with infiltration of corpus callosum. The gyrus appears thickened. No significant diffusion restriction.
- MR spectroscopy showed choline peak but no gross Chol/NAA ratio increase. The FA maps show disruption of white matter fibers in the region. rCBV map shows relative increase.
- Overall, high grade glioma, likely oligodendroglioma IDH mutant 1p19q codeleted.
- HPE – WHO grade 3 oligodendroglioma NOS.

Oligodendroglioma

- Definition: A diffusely infiltrating glioma defined by IDH mutation and 1p/19q codeletion.
- Grade: Classified as WHO grade II or III (anaplastic); grade III shows more enhancement, higher cellularity, and worse prognosis.
- Age / Symptoms: Typically affects adults 30–50 yrs, often presents with seizures due to cortical involvement.
- Location: Predominantly involves frontal lobes, often cortical–subcortical.
- CT: Frequently shows coarse or punctate calcifications; mild hypodensity.
- MRI: T2/FLAIR hyperintense, T1 hypo- to isointense, often with minimal or no enhancement in grade II; enhancement increases with grade III.
- Advanced MRI: Usually no marked diffusion restriction; elevated rCBV on perfusion and ↑choline/↓NAA on spectroscopy; calcification visible on SWI.
- Behavior: Slow-growing but infiltrative, may cross white-matter tracts and transform to higher grade over time.
- Key Imaging Clues: Frontal location + calcification + cortical/subcortical T2-bright mass with little enhancement strongly suggests oligodendroglioma.
- Clinical Impact: Imaging defines extent, grade-suspecting features, and eloquent cortex involvement, guiding surgery, molecular testing, therapy, and longitudinal surveillance.

Contributor

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