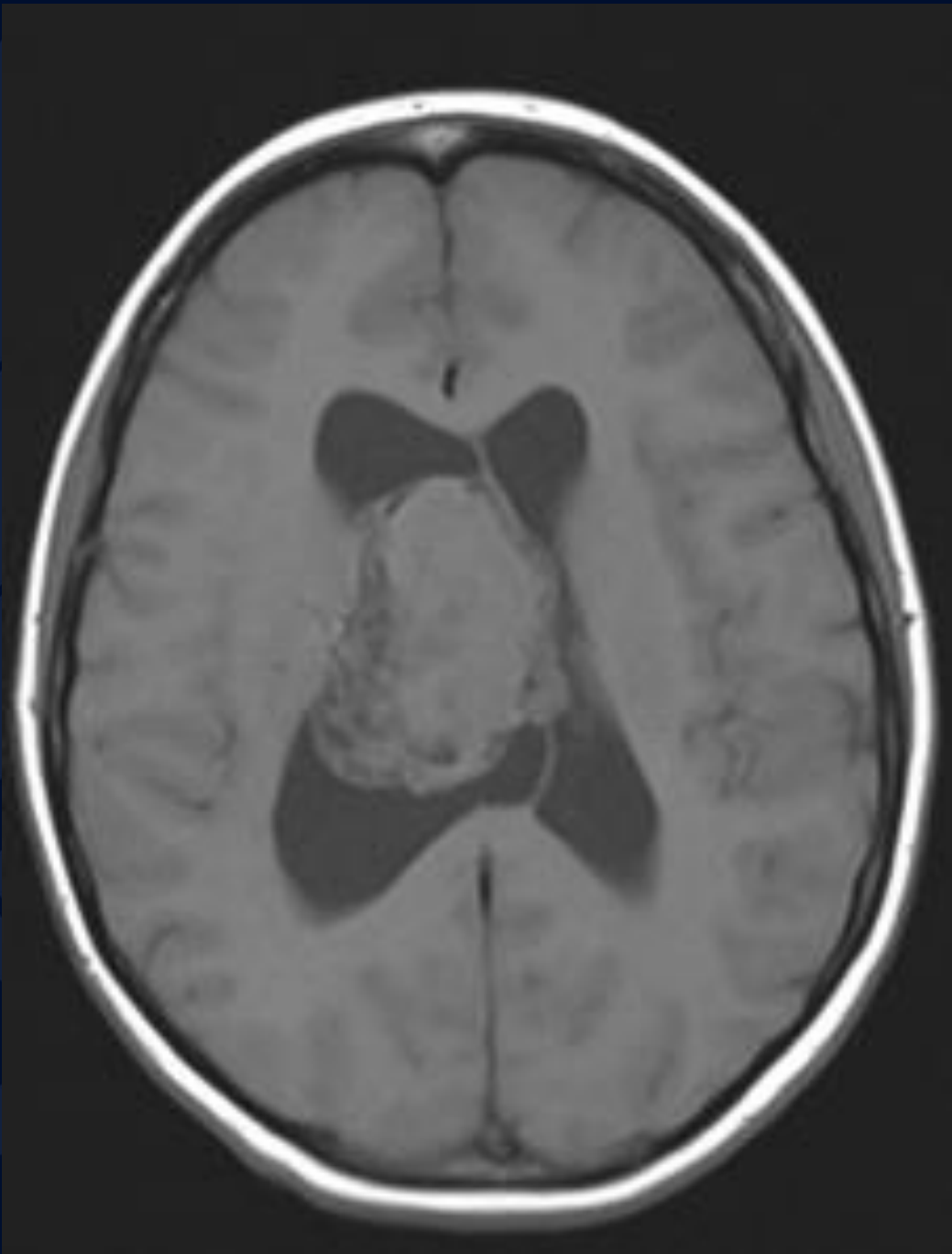
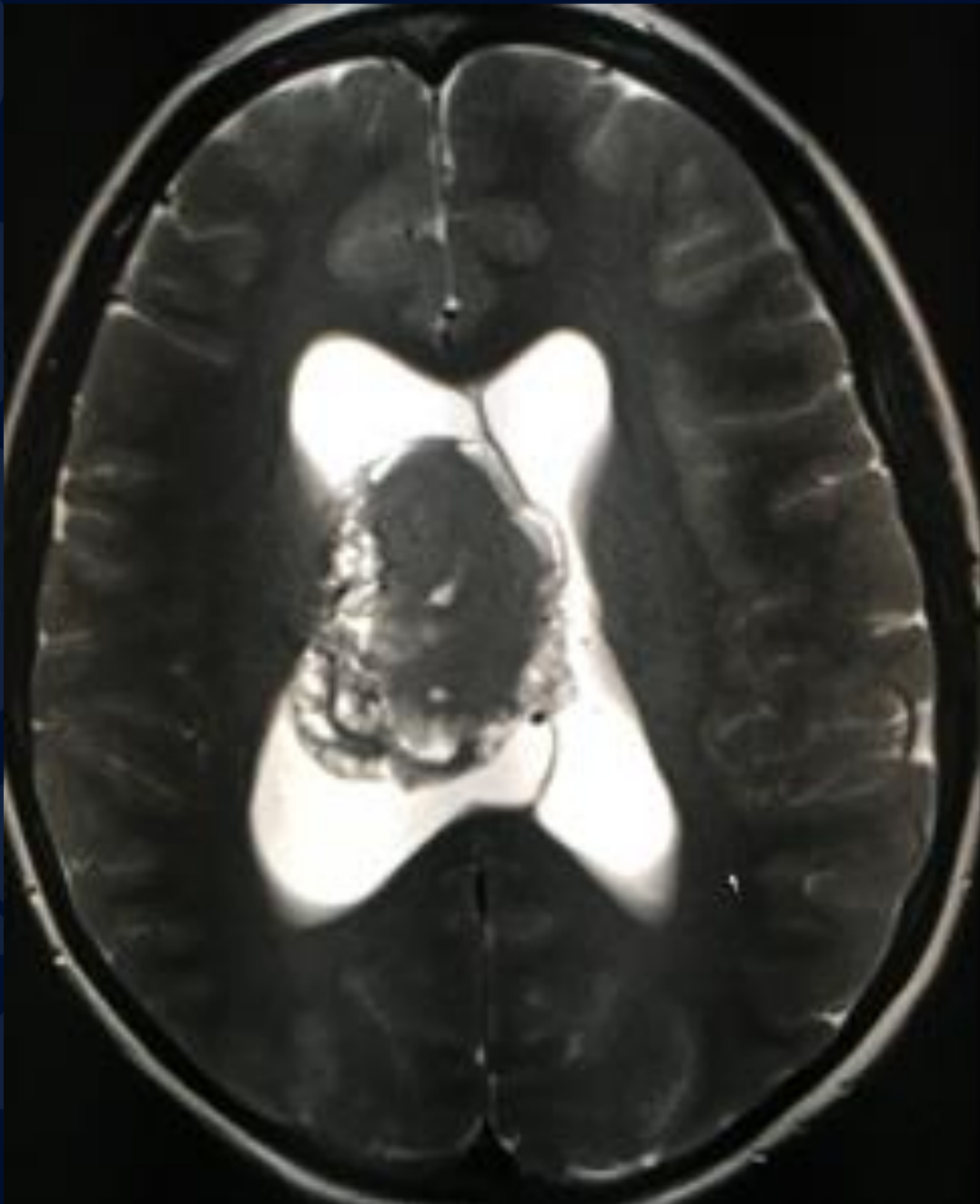


30 y/o female presents with blurry vision, headache

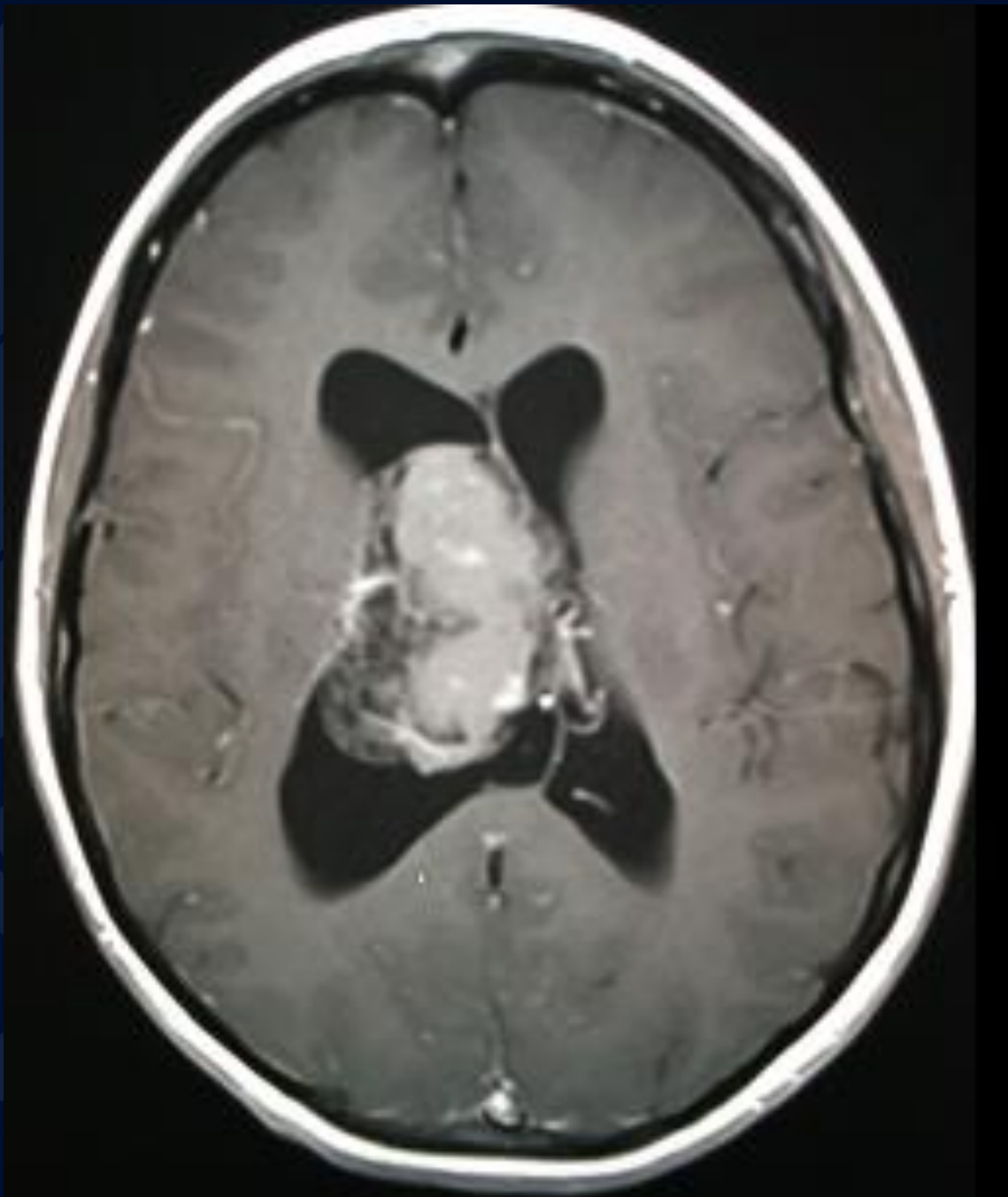
Jignesh Modi, MD



Axial T1 pre contrast



Axial T2 pre contrast



Axial T1 post contrast



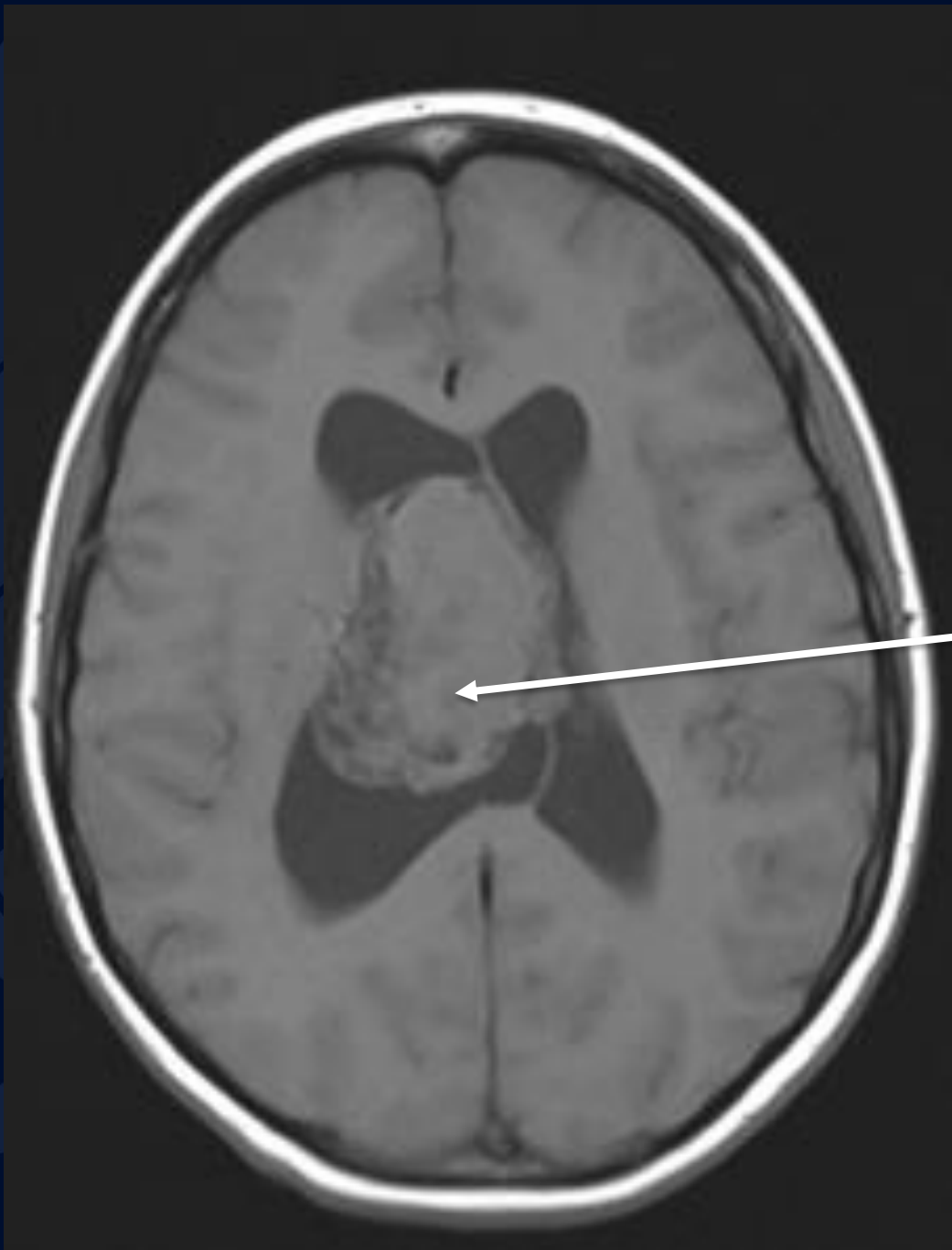
?

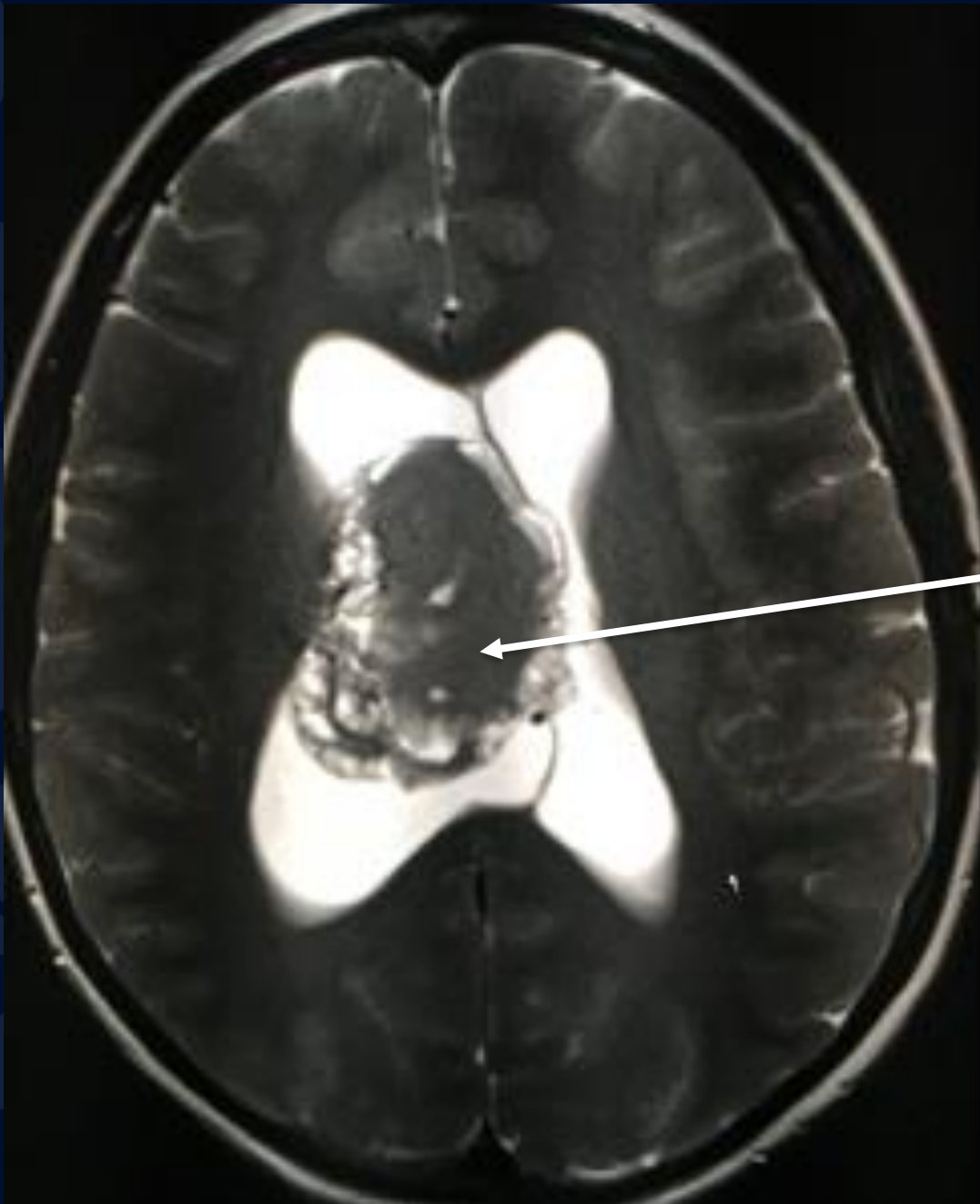
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching out, with a serrated edge.

Central Neurocytoma

Axial T1 pre contrast

Heterogeneous isointense mass

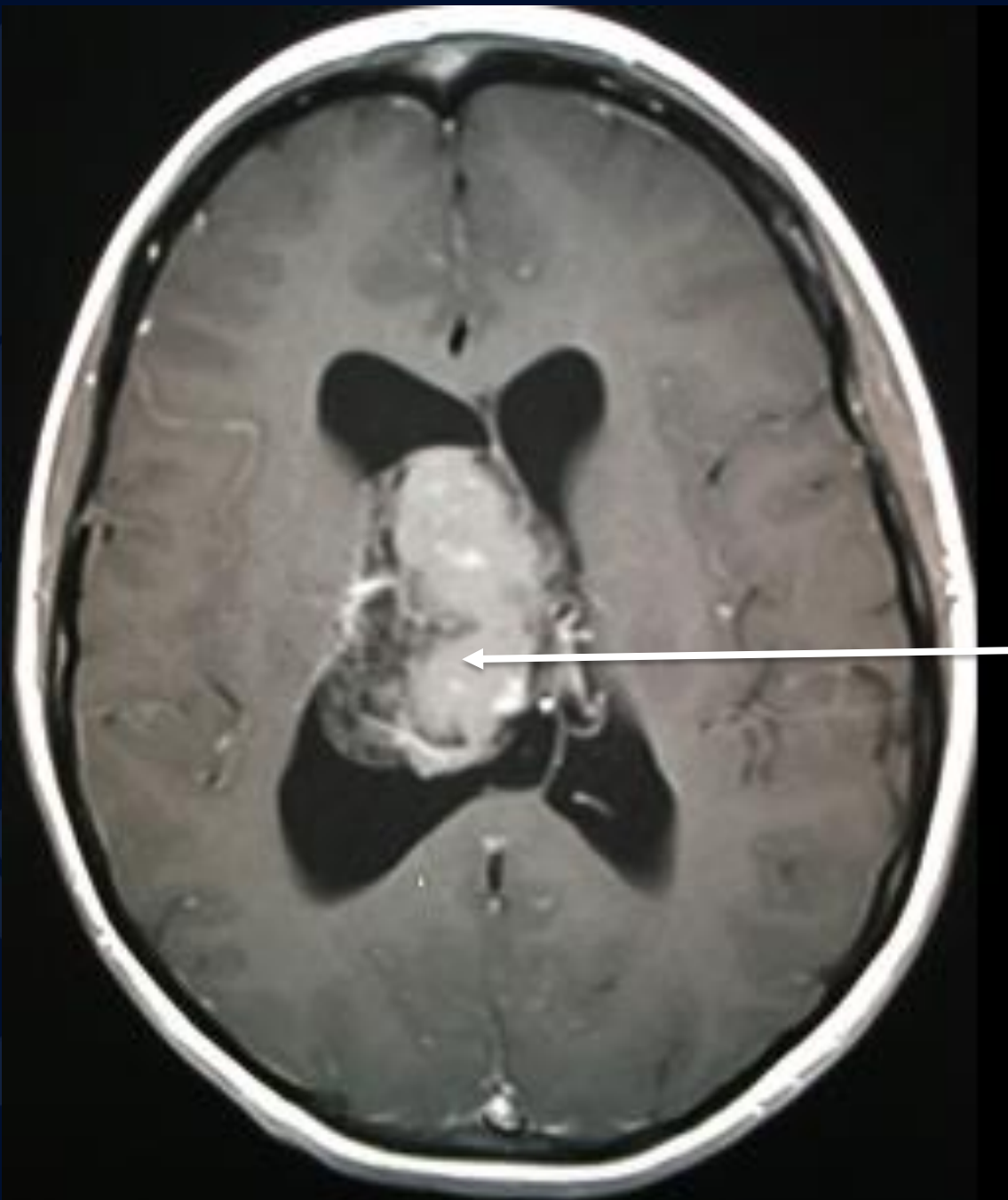




Axial T2 pre contrast

Typical heterogeneous
bubbly appearance
on T2

Axial T1
Post-Contrast



Moderate
heterogenous contrast
enhancement

Central Neurocytoma

- WHO Grade II neoplasm
- Most common primary intraventricular neoplasm of young and middle-aged adults (20-40 yrs)
- No gender predilection
- 0.25 - 0.5% of all intracranial neoplasms
- 10% of all intraventricular tumors

Imaging Findings

Bubbly mass in the body or frontal horn of lateral ventricle is classic for central neurocytoma

CT

- Mixed density solid and cystic intraventricular neoplasm, typically attached to septum pellucidum
- Often hyperattenuating to white matter
- Obstructive hydrocephalus is common
- Calcification in 50-70% of cases
- Frank hemorrhage is rare

MRI

- Heterogenous mass isointense to gray matter on T1W, heterogenous bubbly mass on T2 W
- Mild to moderate heterogeneous enhancement
- Diffusion restriction of solid component

MR Spectroscopy

- Moderate elevated choline, glycine peak (3.55 ppm) and inverted alanine peak

Treatment & Prognosis

- Complete surgical resection is the treatment of choice
- Extent of the resection is the most important prognostic factor
- 90% 5-year survival

References

Osborn: Brain ,imaging ,pathology and anatomy, 2013 pages 532-535

Central neurocytoma: Radiological and clinical-pathological findings in 18 patients and one additional MRS case panel; Haleena Ramsahye ,Huijin He ,Xiaoyuan Feng, SiyaoLi, Ji Xiong Journal of Neuroradiology, Volume 2, May 2013, Pages 101-111 <https://doi.org/10.1016/j.neurad.2012.05.007>