KREP

2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

CASE PRESENTATION

CHAIRPERSON : DR ALFIYA TABASSUM

CO CHAIRPERSON: DR ASHWIN PATIL

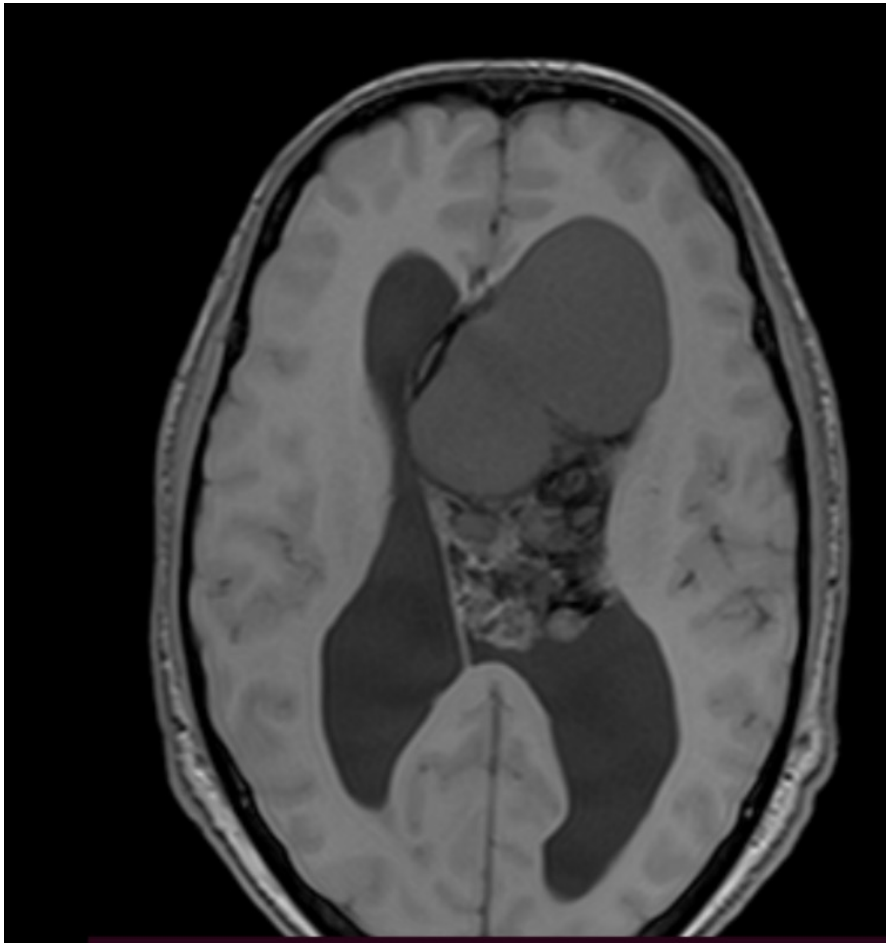
PRESENTER: DR M SAI SREE

J.N.MEDICAL COLLEGE , KAHER UNIVERSITY BELAGAVI

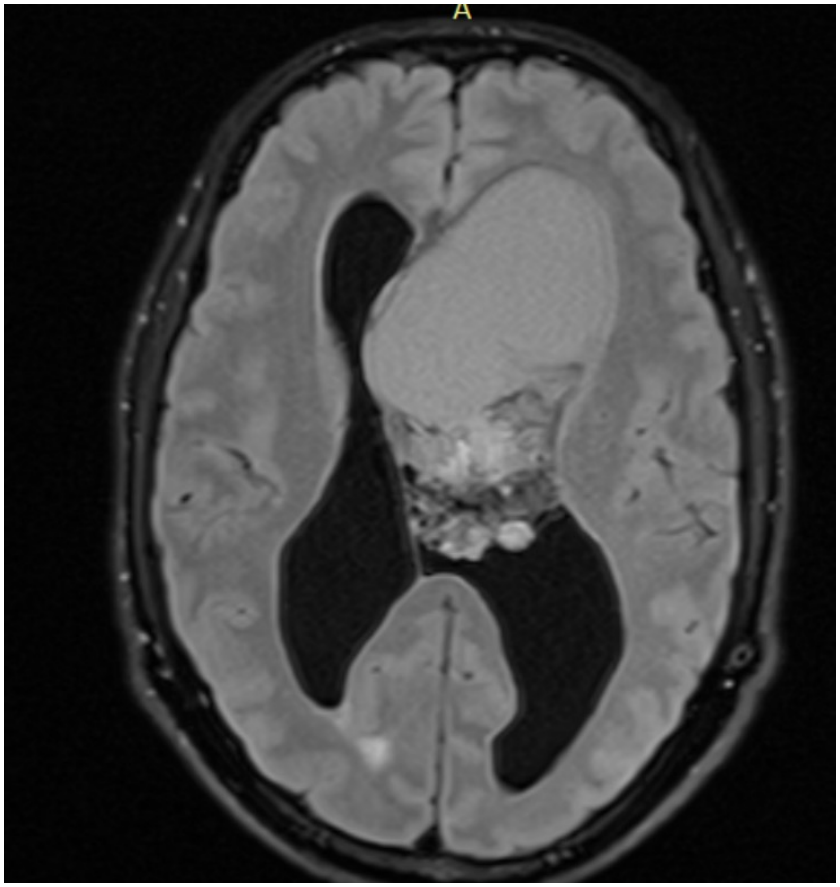
CLINICAL PRESENTATION

- A 50-year-old male patient, came with complaints headache for 3 years, increased during last 3 months
- Associated with nausea & vomitings (projectile)
- Generalized weakness & slurring of speech
- No h/o previous trauma
- No h/o fever
- Patient was advised for MRI BRAIN (PLAIN & SOS CONTRAST)

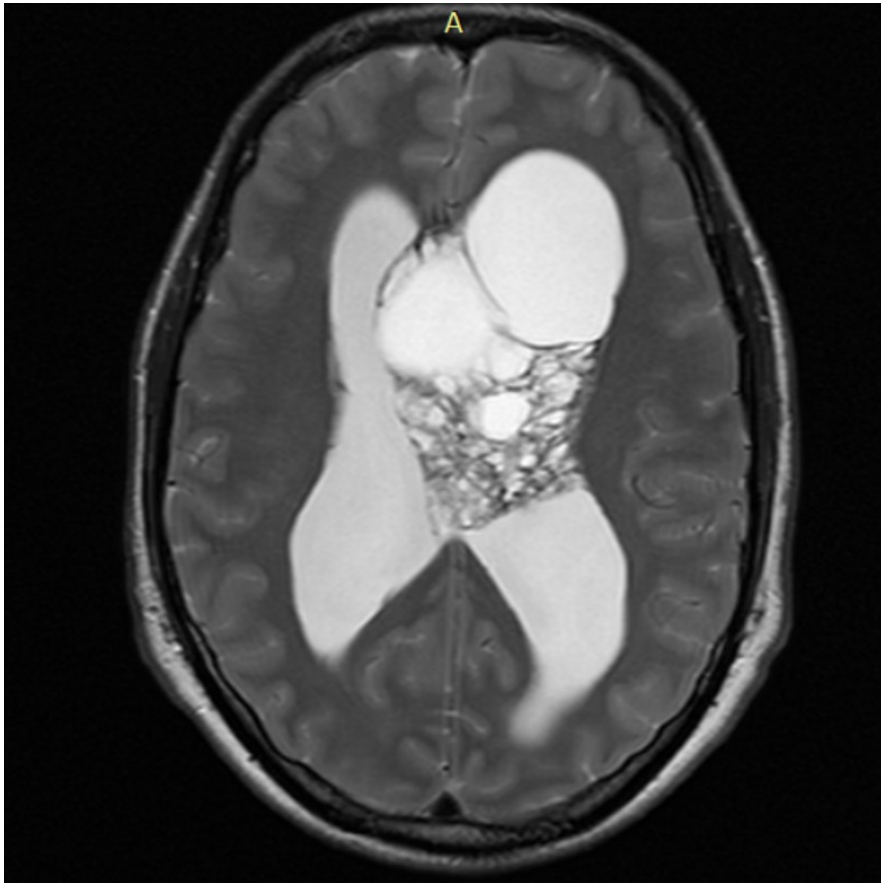
T1 WI



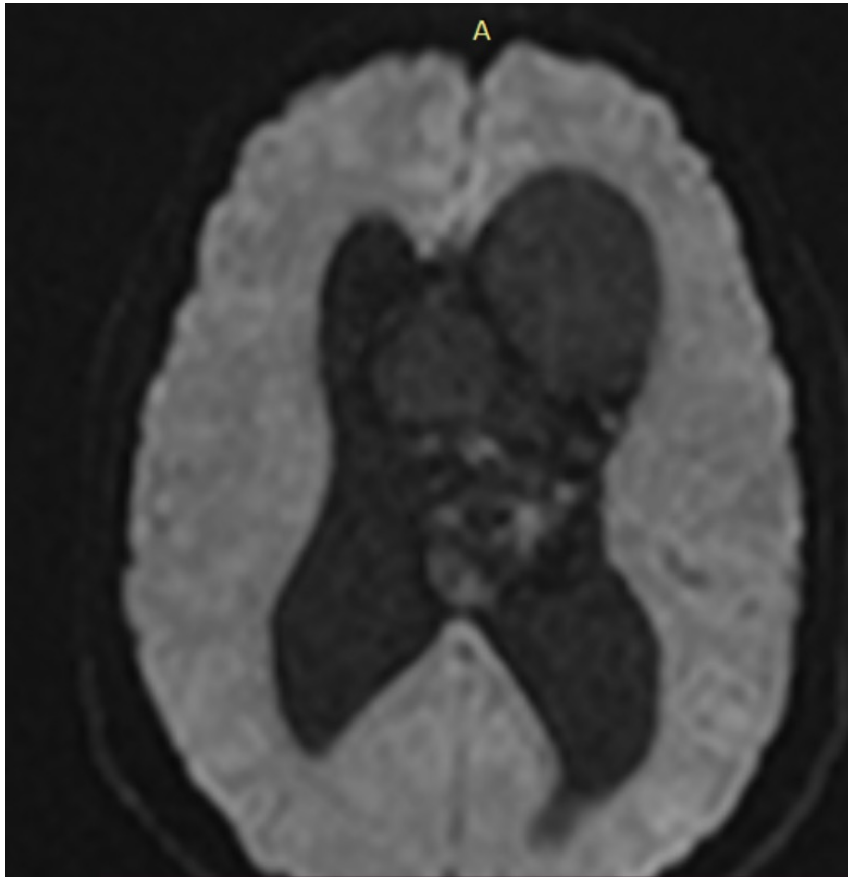
FLAIR

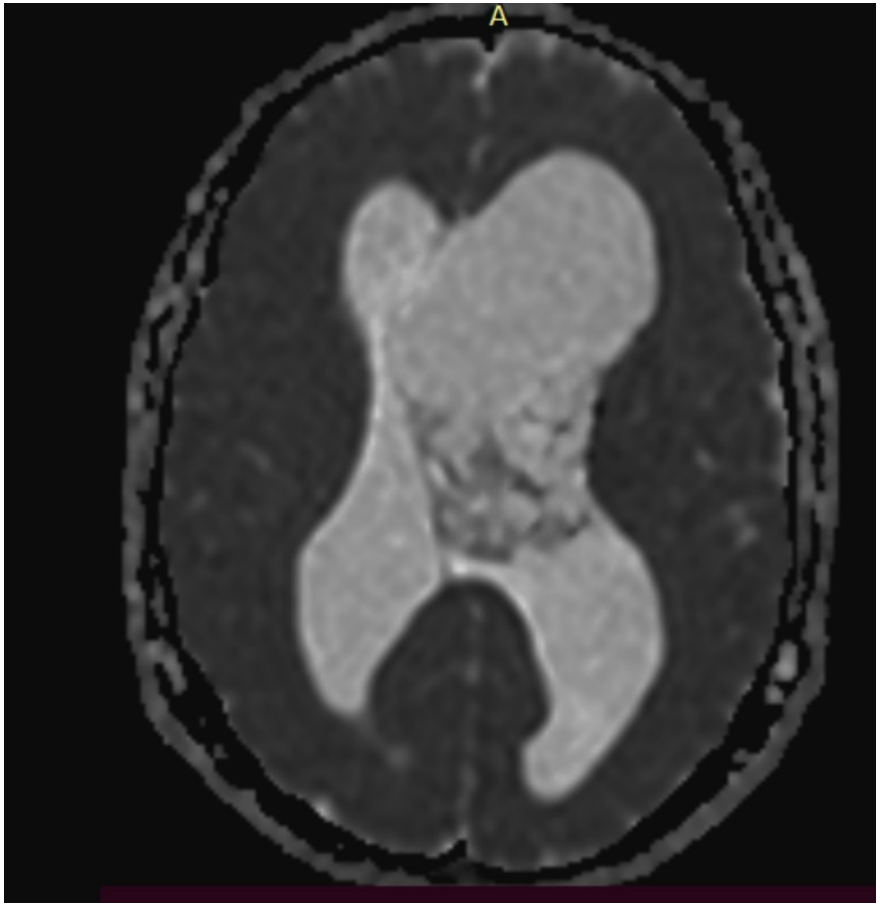


T2 WI

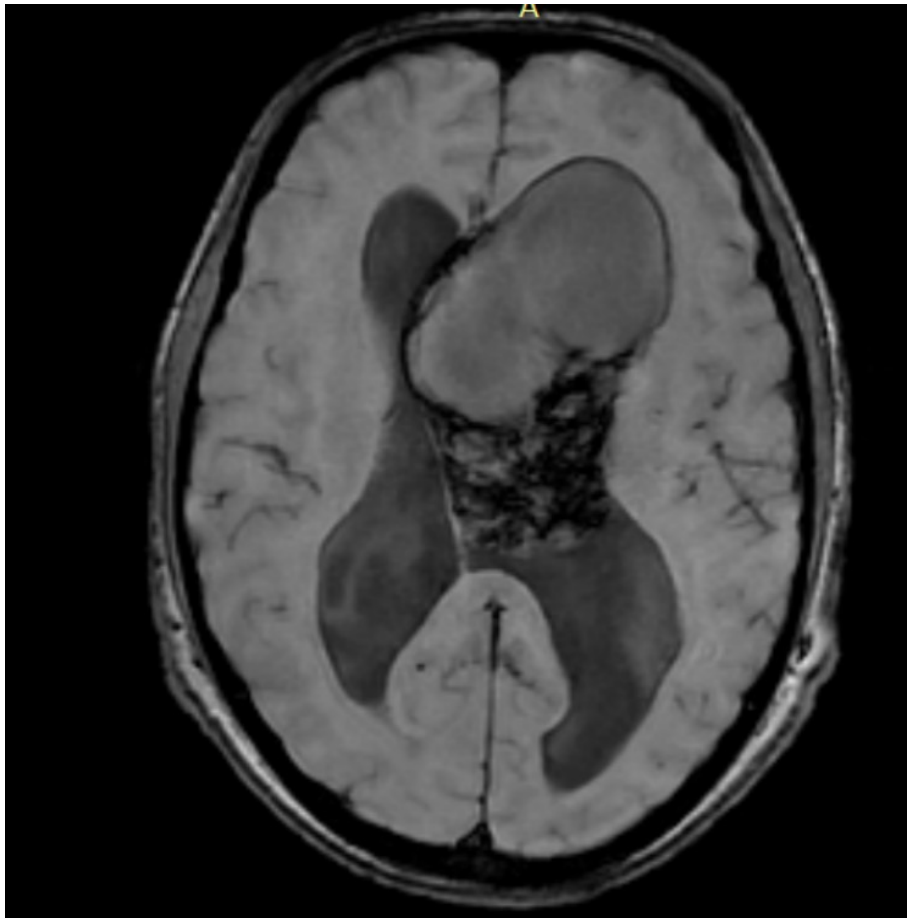


DWI

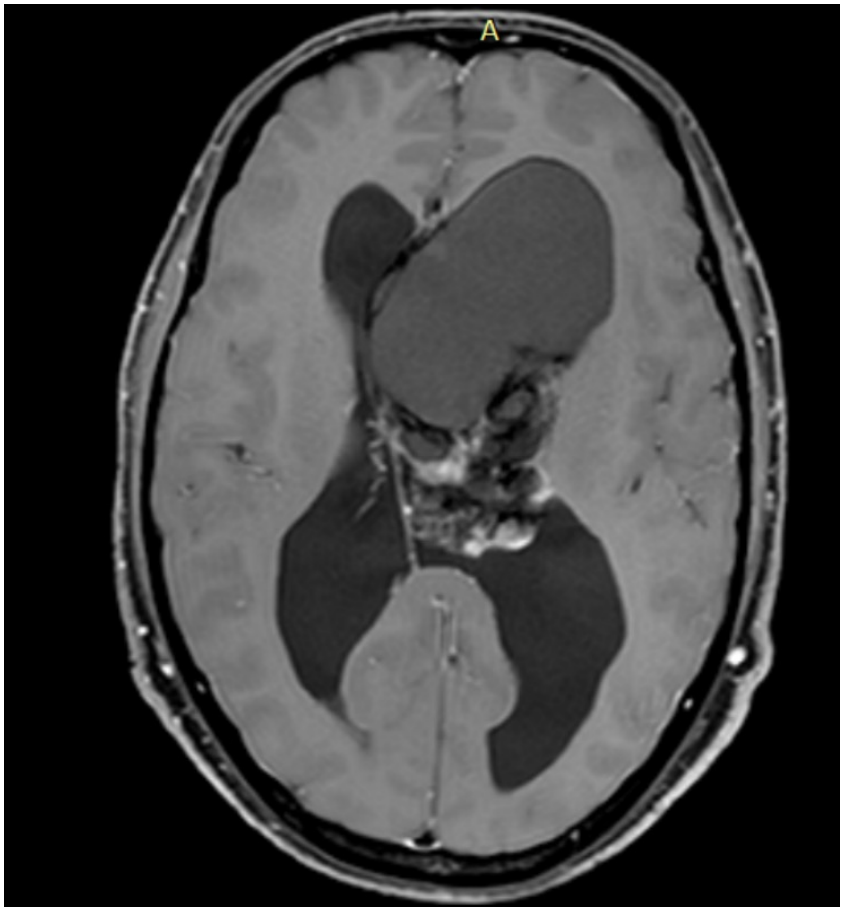


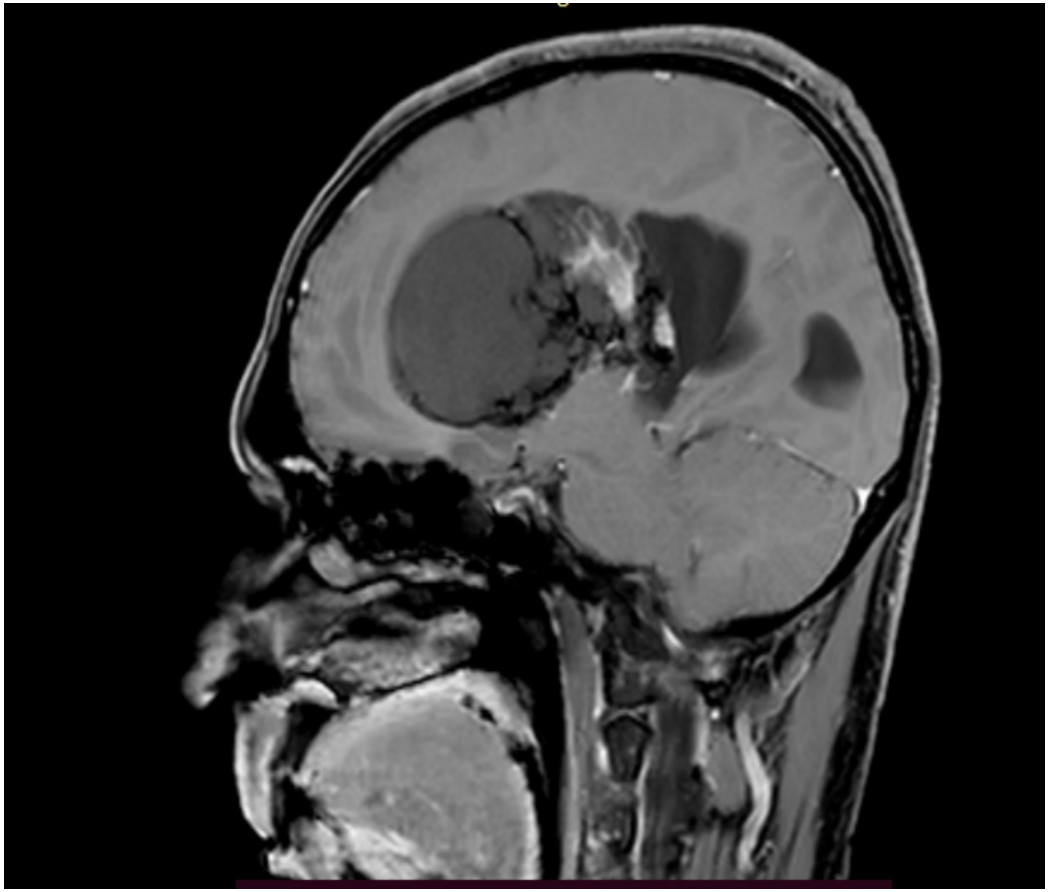


SWI



POST CONTRAST





FINDINGS

- T1 hypointense, T2 & FLAIR heterointense multiloculated solid cystic (predominantly cystic) mass lesion arising from foramen of monro and the frontal horn & body of left lateral ventricle, resulting in upstream dilatation of bilateral lateral ventricles
- The solid components show subtle areas of diffusion restriction on DWI sequence
- The lesion shows multiple areas of blooming on SWI sequence & few prominent flow voids
- No significant adjacent periventricular white matter edema noted.
- On contrast study, the solid component shows peripheral enhancement & cystic component shows no enhancement

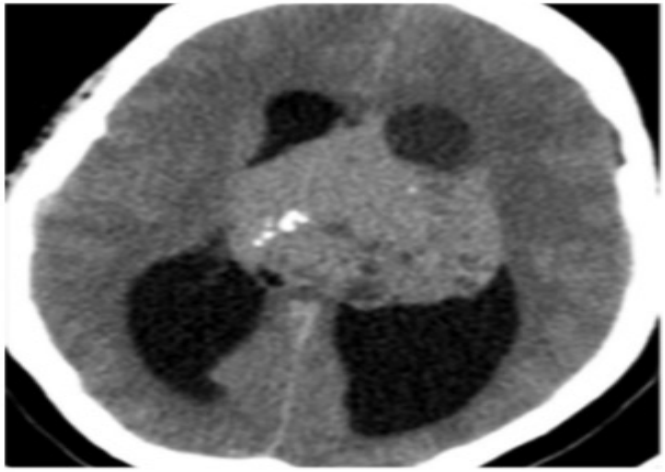
DIFFERENTIAL DIAGNOSIS

- 1) CENTRAL NEUROCYTOMA
- 2) SUBEPENDYMOMA
- 3) EPENDYMOMA

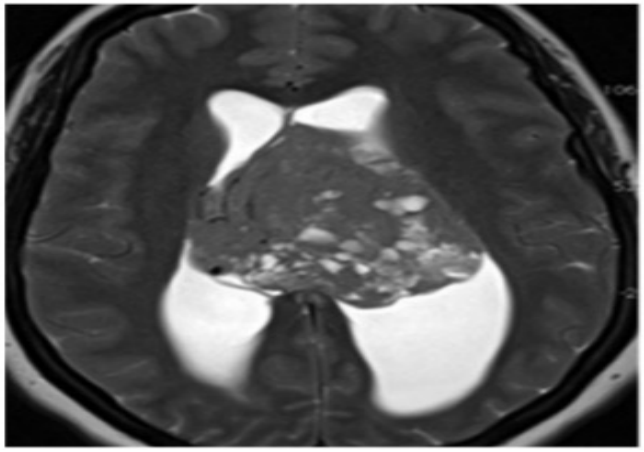
CENTRAL NEUROCYTOMA

POINTS FAVOUR	AGAINST
AGE – 2nd to 4th decade	-
LOCATION- SEPTUM PELLUCIDUM , LATERAL VENTRICLE	
MODERATE ENHANCEMENT (solid)	
TYPICAL- SOAP BUBBLE APPERANCE	

CENTRAL NEUROCYTOMA



a.



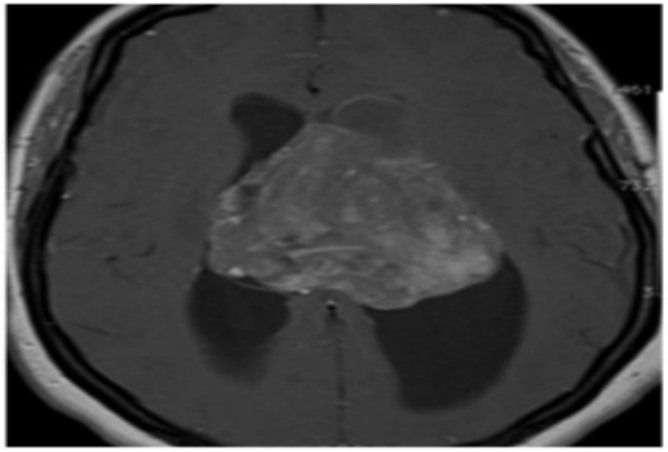
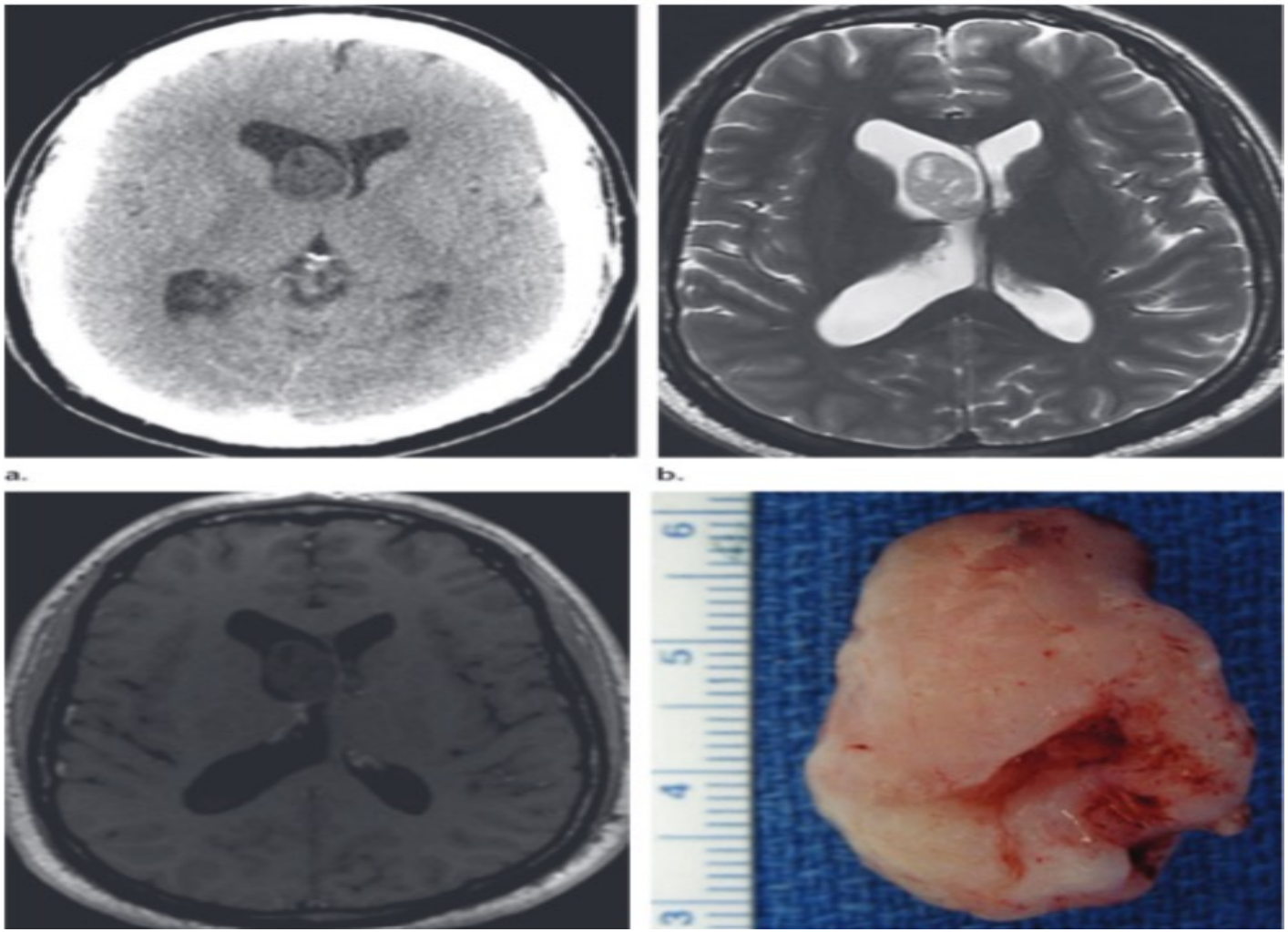


Figure 12. Central neurocytoma in a 27-year-old woman with a 4-month history of headaches. **(a)** Axial nonenhanced CT image shows a lesion located centrally within the lateral ventricles. Small foci of hyperattenuation consistent with calcification are present, as well as foci of hypoattenuation consistent with cystic areas. Hydrocephalus is present. **(b)** Axial T2-weighted image shows a large mass that is slightly hyperintense to gray matter located centrally around the septum pellucidum. Foci of hyperintensity consistent with cystic regions are noted. No increased signal intensity is appreciated in the adjacent brain parenchyma. **(c)** Axial contrast-enhanced T1-weighted image shows moderate heterogeneous enhancement.

SUBEPENDYMOMA

POINTS FAVOURING	AGAINST
AGE- middle age	Well-demarcated nodular masses
LOCATION- frontal horn & foramen of monro	Minimal enhancement
NO CSF dissemination	m/c in 4^{th} ventricle

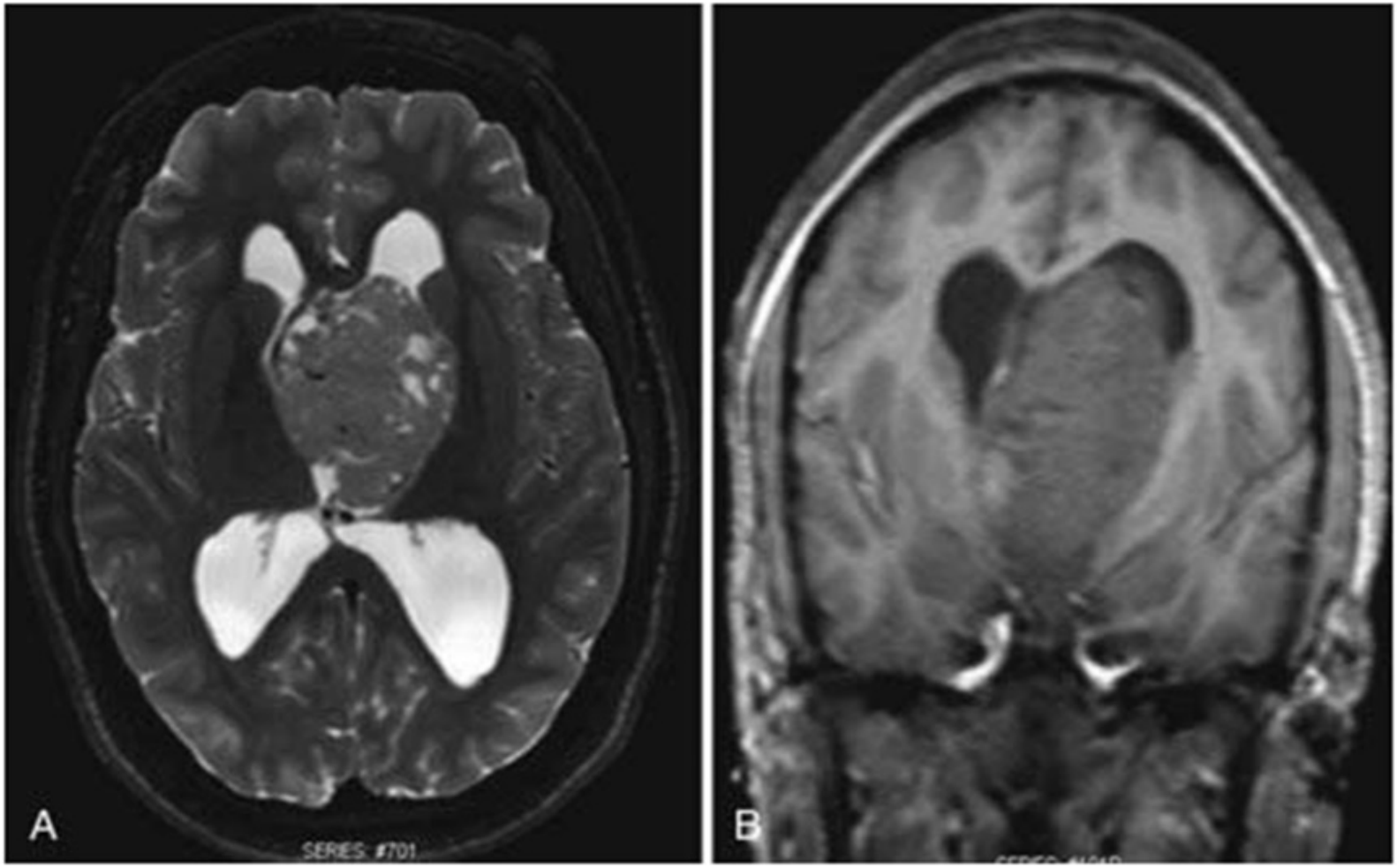
SUBEPENDYMOMA



EPENDYMOMA

POINTS FAVOURING	AGAINST
Lobulated expansile solid-cystic	Age - children
	Location (MC)- 4^{th} ventricle
	No CSF dissemination & plasticity

EPENDYMOMA



FOLLOW UP

- Resection of tumor & EVD drain
- BIOPSY- central neurocytoma (WHO GRADE II)

THANK YOU