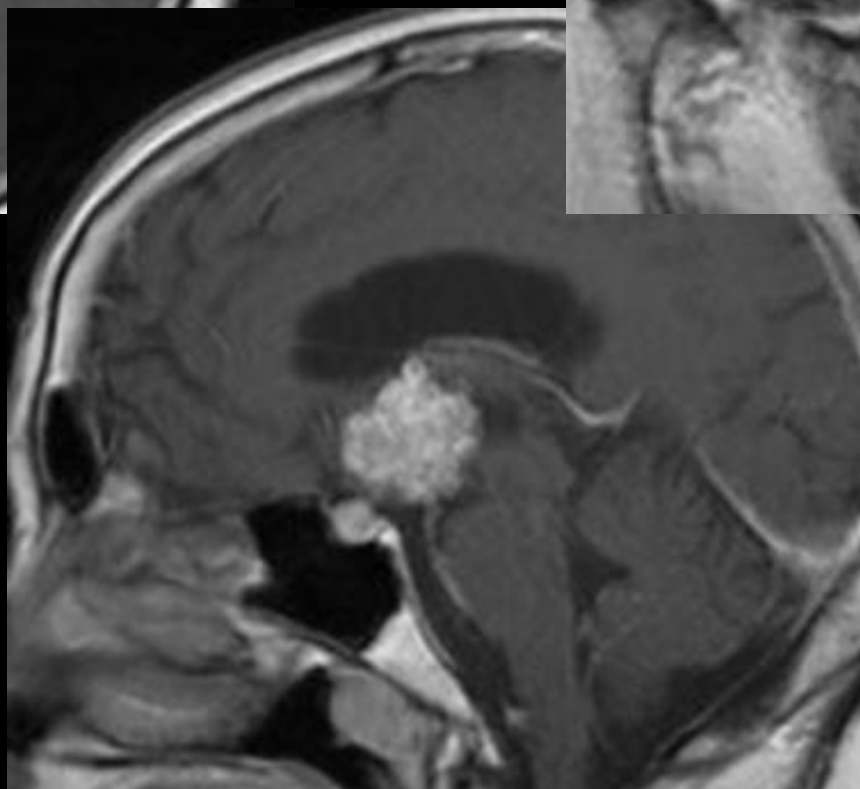
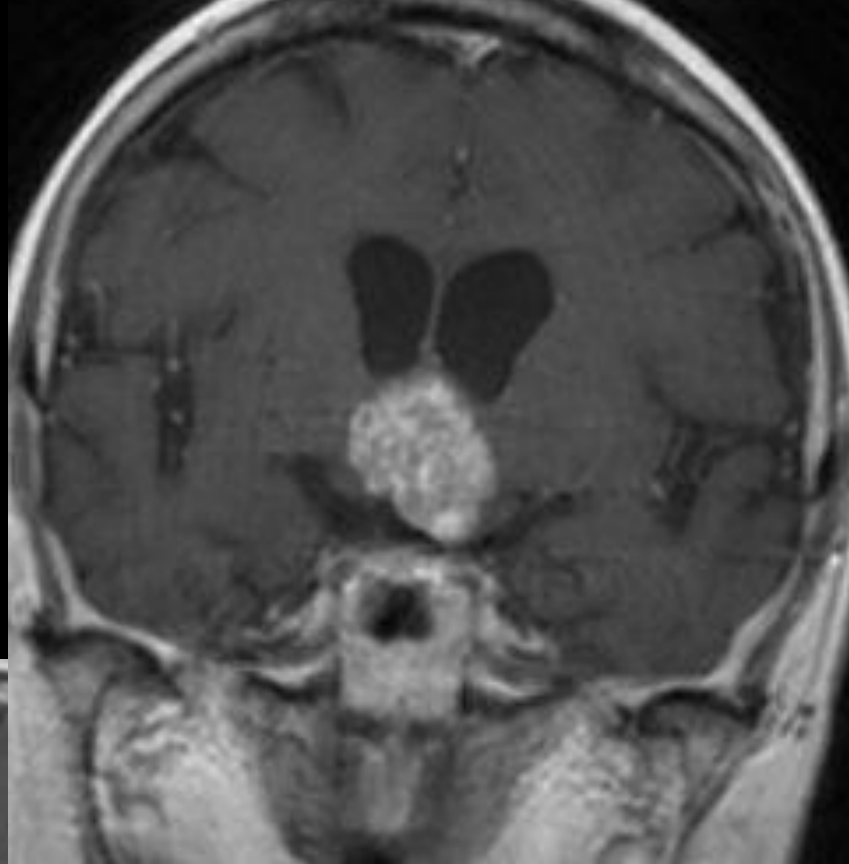
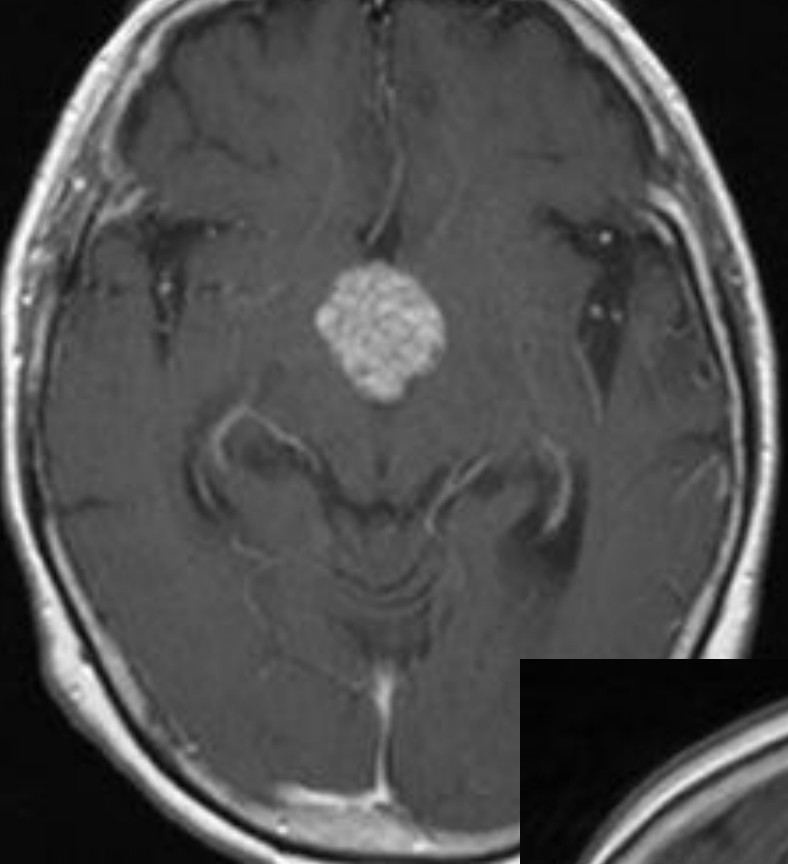
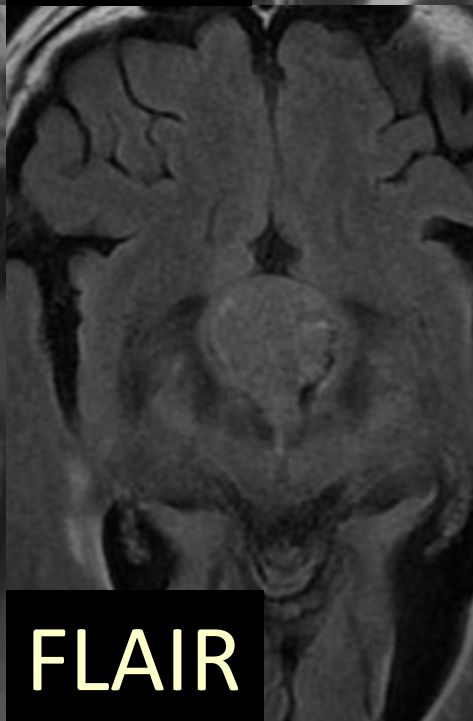
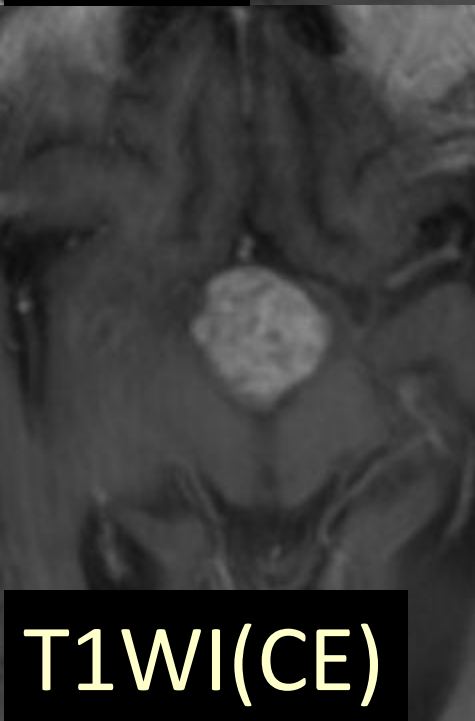
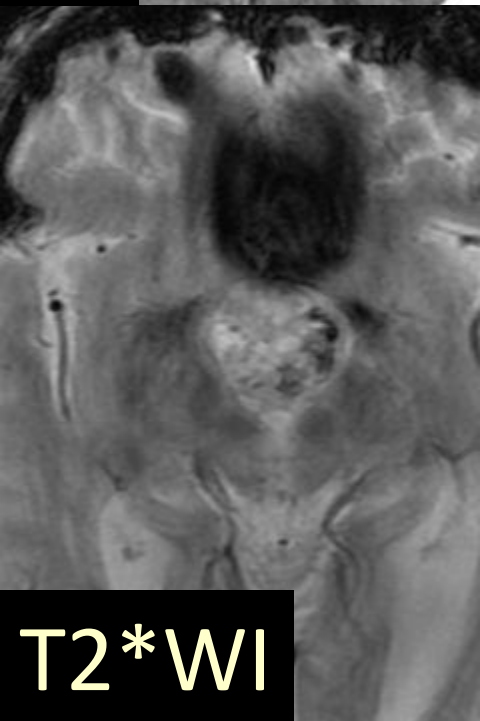
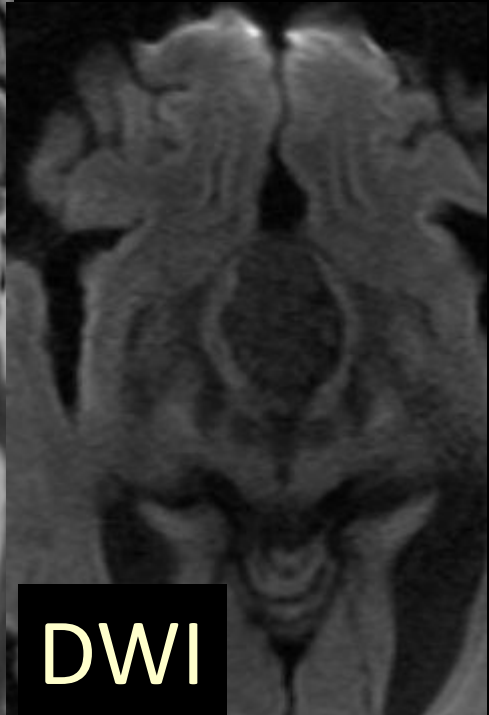
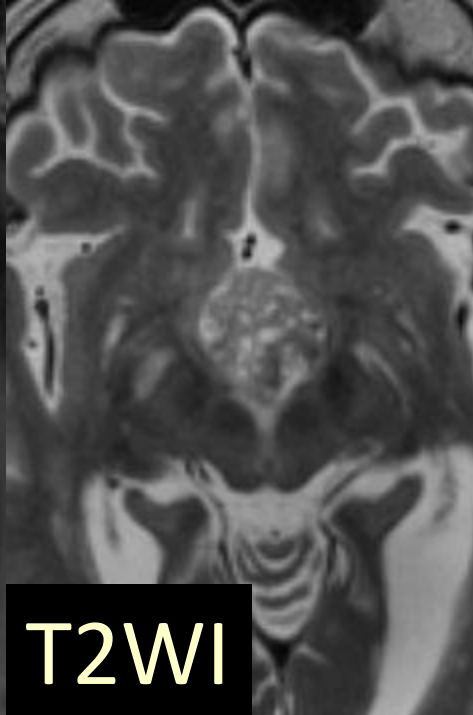
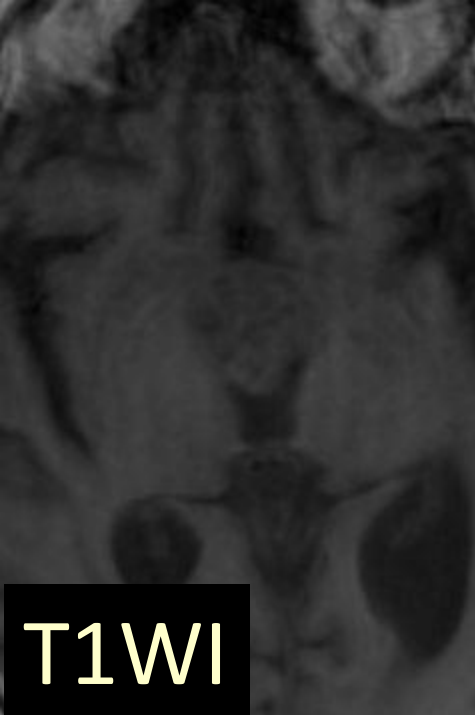


Case

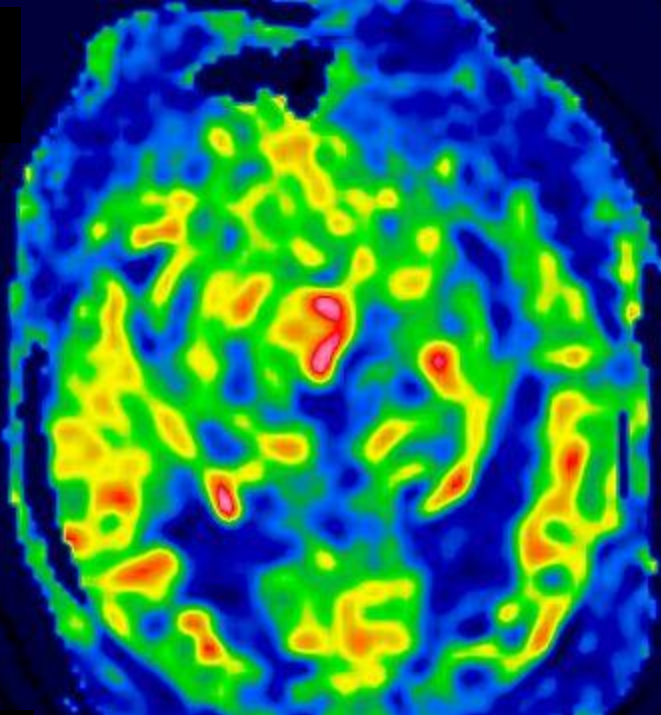
- 67 years old woman
- Chief complaint : wamble, forgetfulness
- Present illness:
 - She had realized wamble since 8 months ago, and realized forgetfulness since 2 months ago.
 - In brain CT, tumor was found, she was admitted to our hospital.
- Body CT: thyroid tumor (FNA class 1)



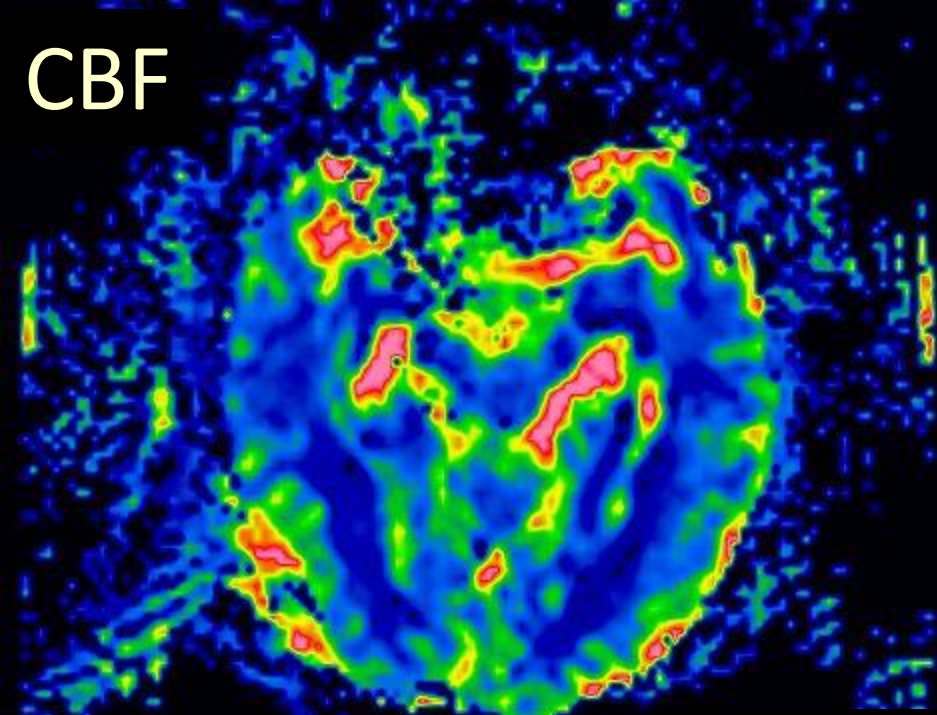
T1WI(CE)



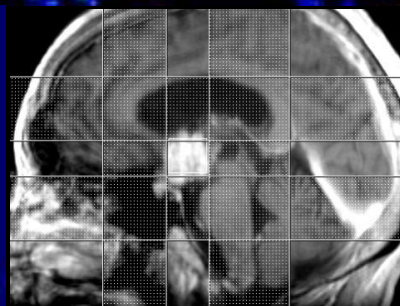
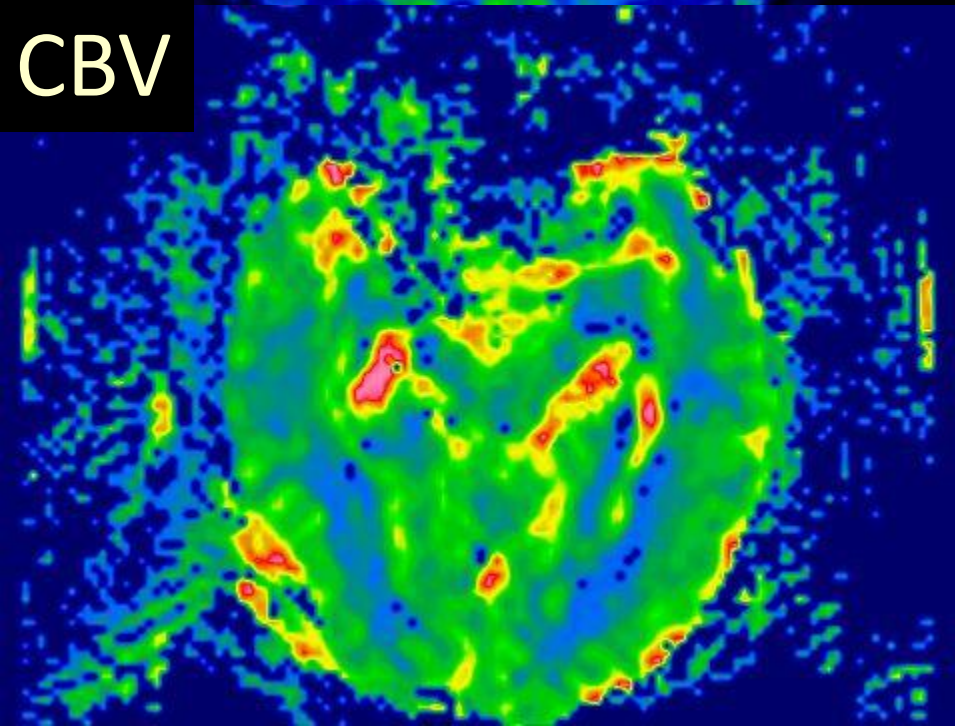
ASL



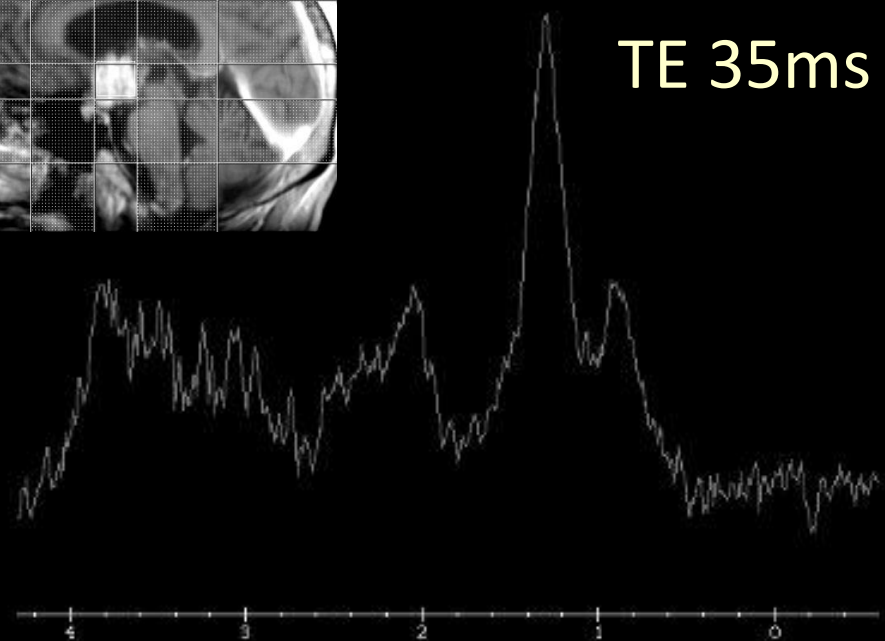
CBF



CBV



^1H -MRS
TE 35ms



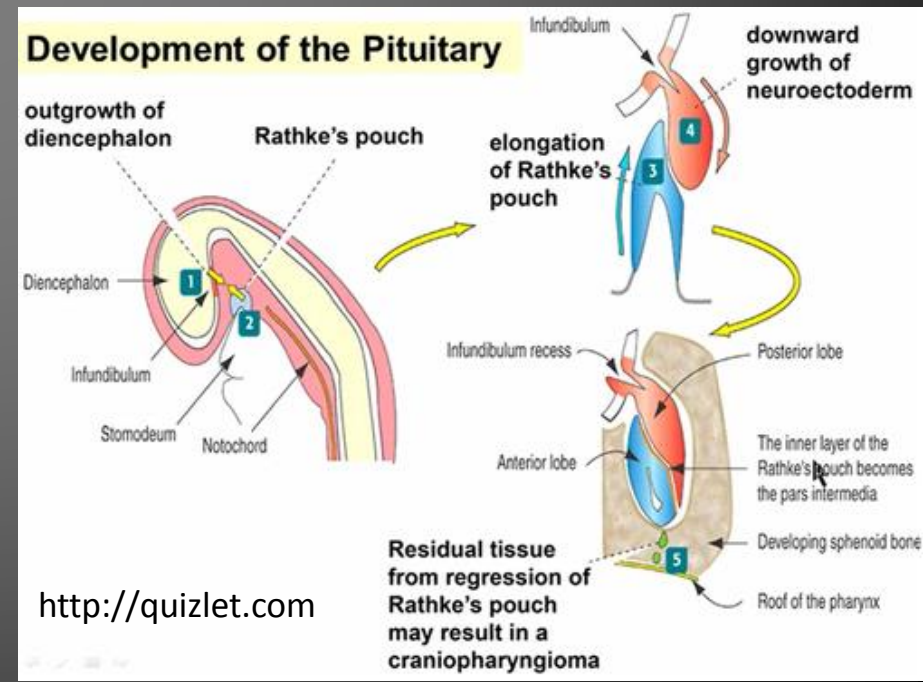
- Biopsy (endoscopic transventricular)
- Surgery (transcallosal approach)
- Novalis

Craniopharyngioma

Craniopharyngioma

- Craniopharyngiomas are benign partly cystic epithelial tumors (WHO grade 1), which originate from the squamous epithelial remnants of Rathke's pouch.

- Rare ectopic locations include: third ventricle, nasopharynx, pineal gland, sphenoid sinus, and clivus.

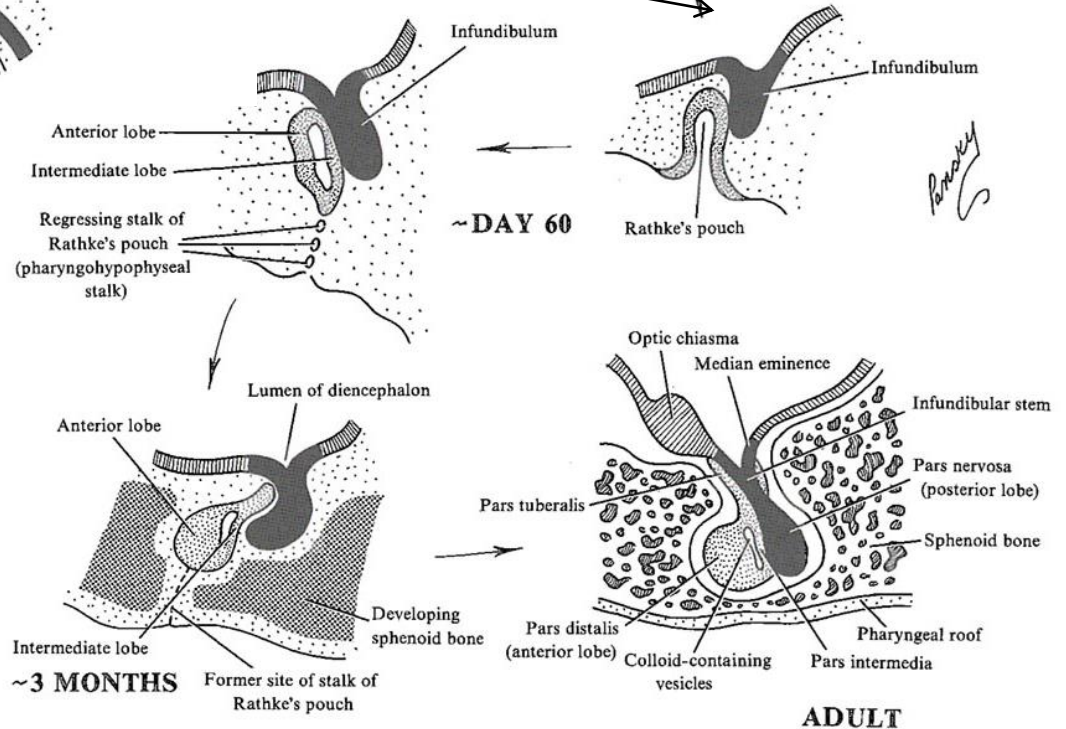
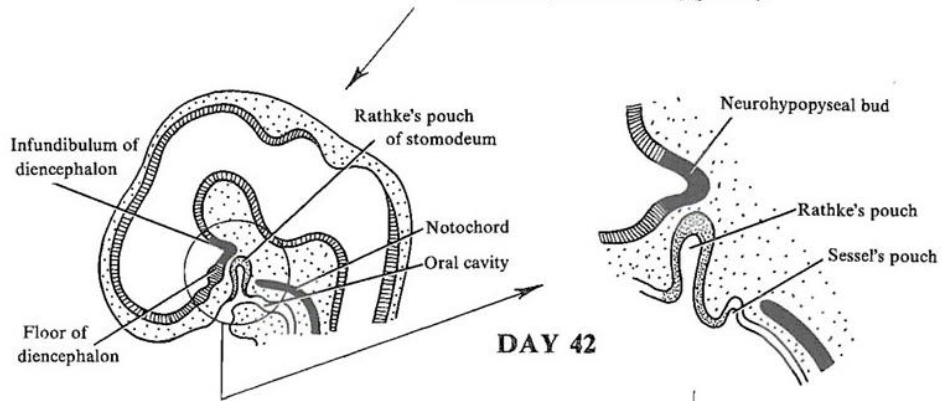
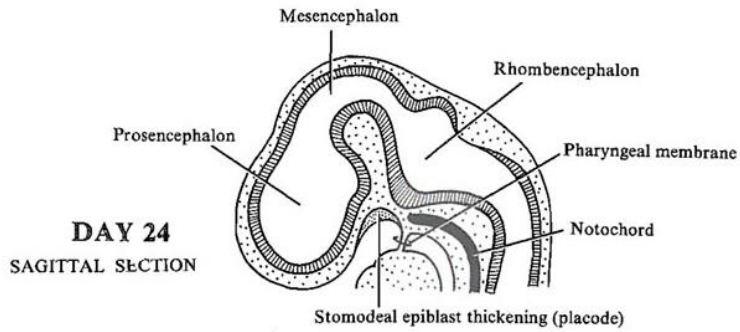


Third Ventricular Craniopharyngioma

- The location of the tumor is determined by the embryological events of the sellarsuprasellar region.
- The pars tuberalis, while developing from the ventral portion of the Rathke's pouch, rotates to come in contact with the neuroectodermal layer of the ventral cerebral vesicle (the precursor of the infundibulum and the third ventricular floor).
- The pial membrane, developing from the mesoderm, normally intervenes between the stomodeum and the cerebral vesicles by the 5th week of gestation before the pars tuberalis rotates. It, therefore, excludes the Rathke's pouch cells from the subpial space.

Third Ventricular Craniopharyngioma

- A craniopharyngioma developing from these cells remains extra-pial and depending upon the extent of rotation of the pars tuberalis, is located in the vicinity of the hypothalamic floor, the pituitary stalk or the posterior pituitary lobe respectively.
- If, however, the development of the pial membrane is delayed, the Rathke's pouch cells come directly in contact with and become implanted within the neuroectoderm of the developing cerebral vesicle (2-3).



Penalty

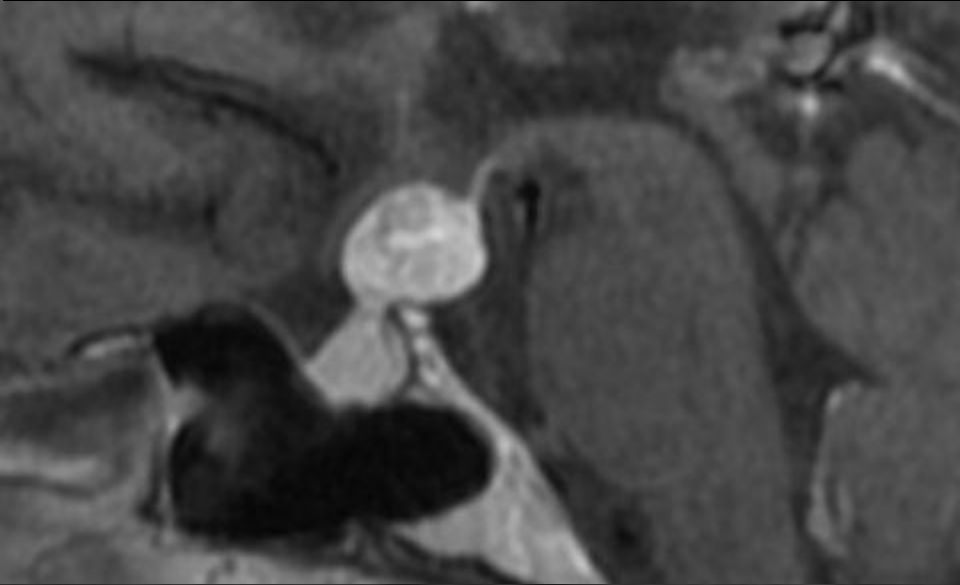
	adamantinomatous type	Squamous type
frequency	90%	10%
age	child	adult
calcification	common	less common
cyst	common	less common

- $^1\text{H-MRS}$: Lip/Lac peak(++)
 - characteristic of cholesterol and lipid constituents of a CPs
- PWI: low rCBV

Differential Diagnosis

- Chordoid glioma of the 3rd ventricle
 - 35-60 years old
 - strong homogenous enhancement is common
 - 25% cases with intratumoral cyst formation
 - occasional cases with calcification
- Meningioma
 - common in posterior 3rd ventricle
- Brain metastasis

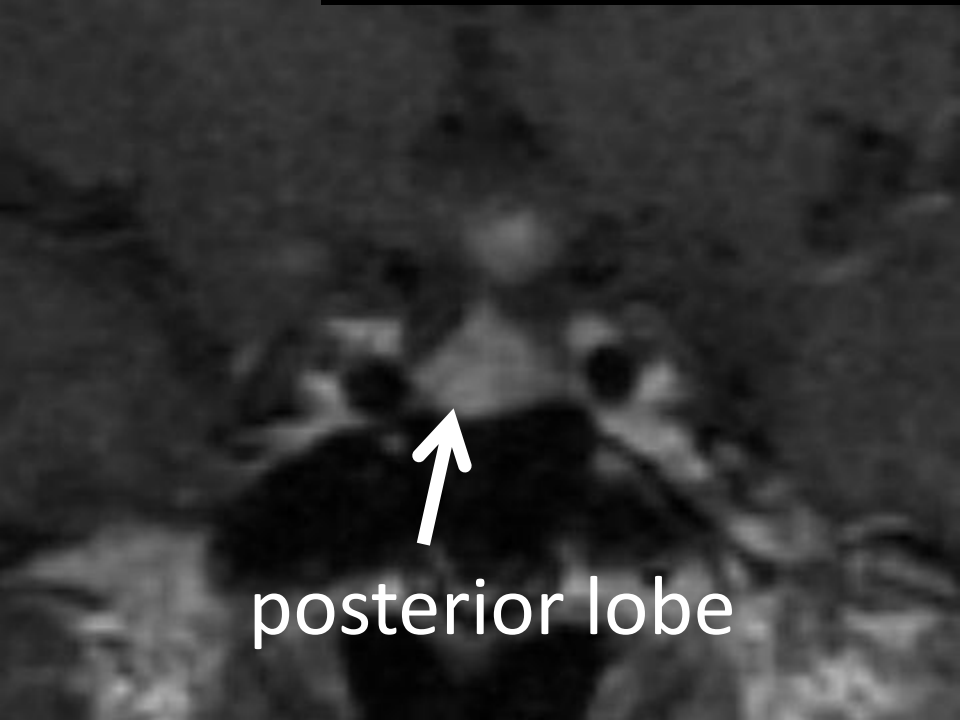
Chordoid glioma of the 3rd ventricle



Dynamic study



↑
anterior lobe



↑
posterior lobe

References

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3. Sanjay Behari, et al. Intrinsic Third Ventricular Craniopharyngiomas: Report on Six Cases and a Review of the Literature Surg Neurol 2003;60:245–53
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