Craniopharyngioma

- Benign, often partially cystic sellar region tumor derived from Rathke pouch epithelium
- Most common pediatric intracranial tumor of nonglial origin WHO grade I
- Pediatric,
  - commonly ages 5-10
  - Adamantinomatous
  - Frequently has bright cysts on T1 and usually calcified on CT.
- Adult variety : papillary noncalcified, solid.

Bimodal age distribution

- Adamantinomatous type
  - Peak 5-15 years;
  - 90% mixed solid (isodense), cystic (hypodense)
  - 90% calcify
  - 90% enhance (solid = nodule; rim = capsule)
- Papillary type:
  - > 50 years
  - Often solid, isodense, rarely calcifies

Location

- Vast majority of cases, craniopharyngiomas have a significant suprasellar component (95%),
- Most involving both the suprasellar and intrasellar spaces (75%).
- A minority are purely suprasellar (20%),
- Purely intrasellar location is quite uncommon (<5%), and may be associated with expansion of the pituitary fossa [3,]

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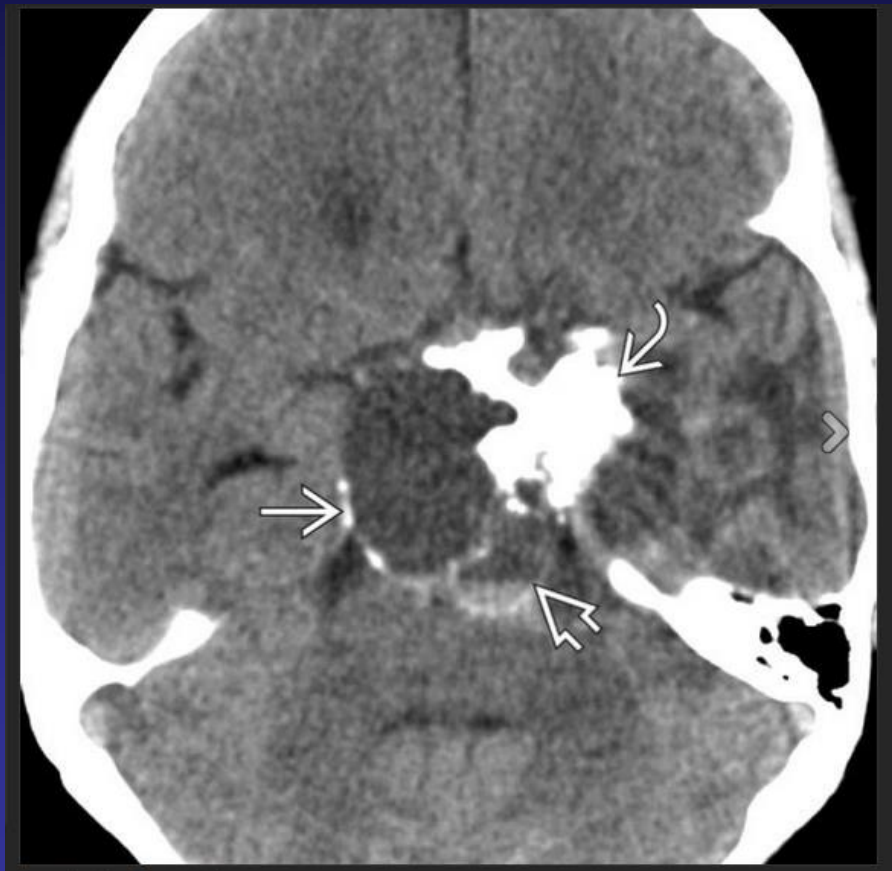
Sagittal T1WI C+ MR shows a complex partially cystic suprasellar mass with an enhancing rim ↗ and solid components ⇨. The multilobulated cysts contain fluid of different signal intensities. Note the large, suprasellar, smaller intrasellar → components in this patient with classic craniopharyngioma



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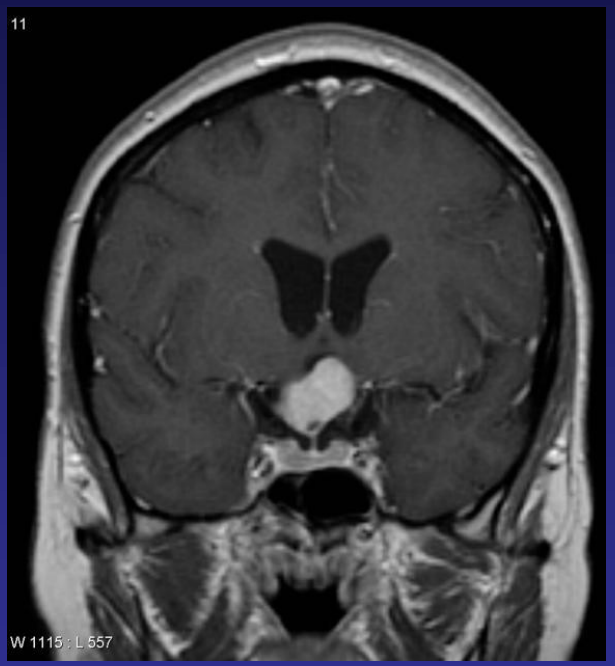
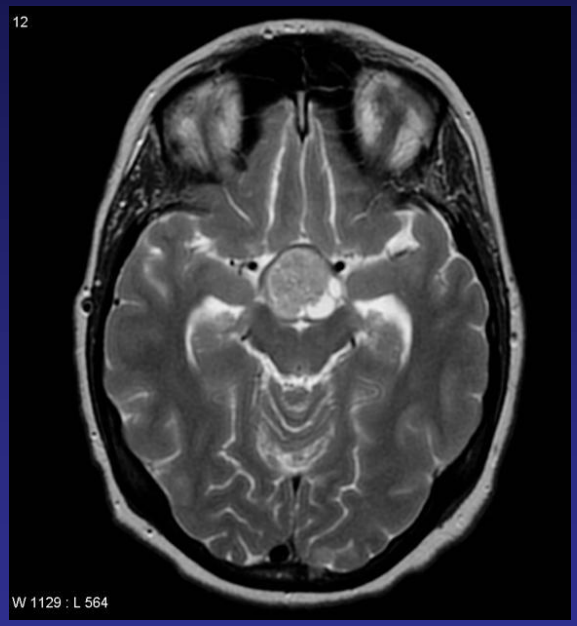
Axial NECT shows a low attenuation suprasellar mass with rim → and globular ↗ Ca++. Note the fluid-fluid level formed by intracystic keratin debris ⇨.

Papillary craniopharyngioma





Bright Sellar mases

- T1 shortening can be due to
- Blood products due to hemorrhage (apoplexy, hemorrhagic adenoma)
- As well as fluid in craniopharyngioma and Rathke Cyst.