



43 y/o

■ *Chief Complaint:*

Blurred vision for 1 year



■ ***Present illness:***

This 53 year old female suffered from blurred vision since one year ago.

Cataract of the right eye was diagnosed.

After surgery for the cataract ,the condition still persisted.

Headache was also complained at the same time. Sharp pain over bilateral temporal area which radiating to the occipital and dizziness was noted.

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- Thus she went to our neurologist for help, and impaired visual field was noted.

EEG and NCV revealed normal

MRI revealed suprasellar mass.

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- *Family history:*  
not contributory

*Personal history:*  
denied

*Past history:*  
DM with OHA control  
Op Hx: Cataract surgery of right eye



■ ***Physical examination:***

*Conscious:* clear, E4M6V5

*HEENT:*

grossly normal, JVE(-), LAP(-)

*Chest:*

breathing sound: no crackle ,no wheezing

heart: RHB without murmur

*Abdomen :*

no palpable mass, L/S not palpable, no  
distension, no rebounding pain, no tenderness.

*Extremities :*

freely movable, no pitting edema



■ *Neurological Examination:*

Visual acuity: fair

Visual field: Left side temporal hemianopsia  
Right side defect



■ *Image:*

A lobulated mass of marked hyperintensity on T2WI





■ 住院治療經過:

operation: on 3/29 /01

*craniotomy+removal pituitary fossa tumor*

DI developed and DDAVP was given





■ ***Pathology:***

The specimen is submitted

1. solid component

2. cystic component

Microscopically, it shows a picture of craniopharyngioma of adamantinomatous type with squamous cell proliferation with ghost cell change and wet keratin formation and focal calcification.



■ *Impression:*

# *Craniopharyngioma*

■ ***CT: on 4/4/01***  
S/P right craniotomy

Residual suprasellar  
tumor with  
hyperdensity at  
right side is noted.


No midline structures  
deviation





## CRANIOPHARYNGIOMA

- (1) Alternative proposals suggest that these tumors are derived from a malformation of the embryonic cells that can linger in the area and are not absorbed during fetal life for a significant period of time, leading to abnormal growth.
- (2) These tumors range in size from very small round nodules to large loculated cysts.
- (3) In adults, a squamous papillary form occurs; although it has no adamantinomatous features, a less cystic stratified squamous epithelium is found histologically. Keratin deposition may also occur.

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- (4) The most common presenting complaints are compression of the chiasm, causing visual disturbances in the form of bitemporal visual field loss or obstruction of the cerebrospinal fluid pathways yielding papilledema, headache, nausea, or vomiting.
- (5) The primary endocrinological disturbance found is related to GH production; next in frequency are disturbances in LH/ FSH, ACTH, and TSH.





## *Differential diagnosis:*

*(1) pituitary adenomas:*

which have no calcifications, and separation of these two possibilities without surgery may be difficult in adults.

*Microadenoma: (<10mm)*

Magnetic resonance imaging is the technique of choice for evaluation of the juxtaseilar area. On T1-weighted MR scans performed immediately following administration of intravenous gadolinium contrast medium, most pituitary microadenomas are seen as an area pituitary gland.



- ***Macroadenoma: (>10mm)***

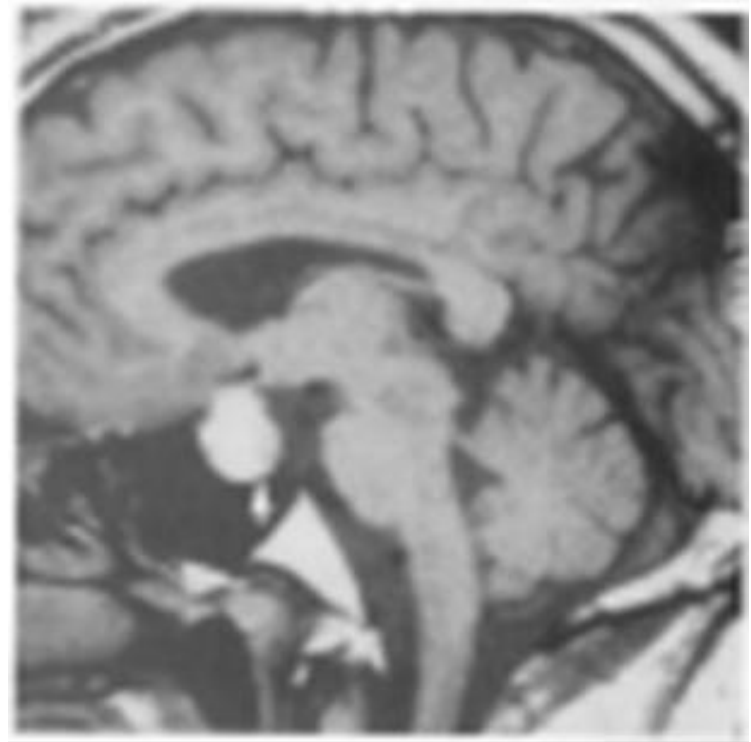
Unenhanced T1-weighted MR scans:  
hypointense or isointense

Enhanced: marked homogeneous

Cystic or necrotic areas occur frequently in very large pituitary adenomas reduced signal on T1-weighted images.

High signal intensity on the T1-weighted images: the presence of prior hemorrhage.

Hemorrhagic pituitary macroadenoma. The sagittal T1-weighted images without intravenous contrast material indicate a high-signal-intensity intrasellar mass. Close inspection indicates a fluid level within this lesion. The pituitary fossa has been expanded, and there is suprasellar extension. Transsphenoidal surgery revealed hemorrhagic fluid within a pituitary macroadenoma.





***(2) Rathke's pouch cysts:***

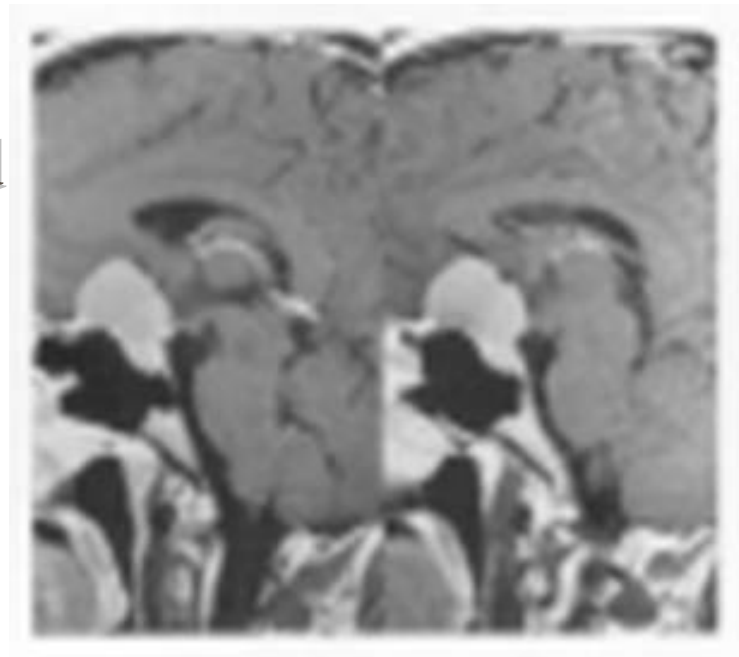
are usually single cysts and lack a solid component.

### *(3) Meningiomas:*

On MRI studies, meningiomas are typically isointense to hypointense.

often possess a enhanced "dural tail," and a cleavage plane can be visualized on imaging studies.

Calcification within meningiomas is found in 15% to 20% of cases







## ***Image:***

### **(1) *The CT scan:***

Appearance of these tumors is variable depending on the amount of calcification and cystic change present with the tumor.

Tumors that have extensive cystic change most often appear as well-defined areas of decreased attenuation with areas of calcification about their periphery.



## (2) *MRI*:

Solid portions are usually heterogeneous, with calcifications appearing as low intensity on both T1- and T2-weighted images.

noncalcified portions are isointense or hypointense on T1 images and hyperintense on T2 images

Cystic portions of this tumor are often filled with a lipid-type fluid or old hemorrhage that is of high signal intensity on both T1- and T2-weighted images