General history

Gender: female Birth date: 1948/11/02 Date of admission: 2001/03/24 Chief complaint

Blurred vision since last year

Present illness

- This 53 year old female began experiencing blurred vision and headache since one year ago.
- Sharp pain over bilateral temporal area and radiation to the occipital and dizziness was noted.
- Cataract of the right eye was impressed.
- After surgery for the cataract ,the condition still persisted.

Present illness

Asking help from our neurologist
Impaired visual field was noted
EEG and NCV were normal
Hyperglycemia was noted.
MRI showed suprasellar mass.

Present illness

 Diet and appetite were good
 No GI disturbance, no weakness or lethargy, no weight loss, no feeling hot or cold at different periods of the day, no nipple discharge, no hearing loss, no change in her sense of smell or taste. Family history: Nothing in particular Personal history: DM under OHA control Past history: Cataract surgery of right eye

Physical examination

□ Cons: clear,E4V5M6 ■ HEENT: grossly normal, JVE(-), LAP(-) Chest: symmetrical expansion 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

Neurological examination

Visual acuity:fair Visual field: Left side temporal hemianopsia Right side defect

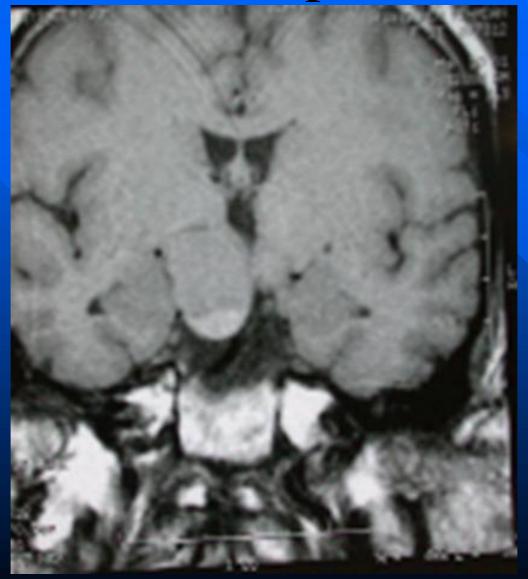
Laboratory data

3/24 Cortisol : 6.52 ug/dl (5-25) **3/25** Cortisol : 11.7 ug/dl FSH: 22.4 mIU/ml (1.4-9.6) LH: 10.2 mIU/ml (0.8-26) Prolactin : 8.63 ng/ml (2.2-19.2) T3: 77 ng/dl (80-180) T4: 4.5 ug/dl (4.5-12) TSH: 1.27uU/ml (0.5-4.5) ACTH: 16.9 pg/ml (9-52)

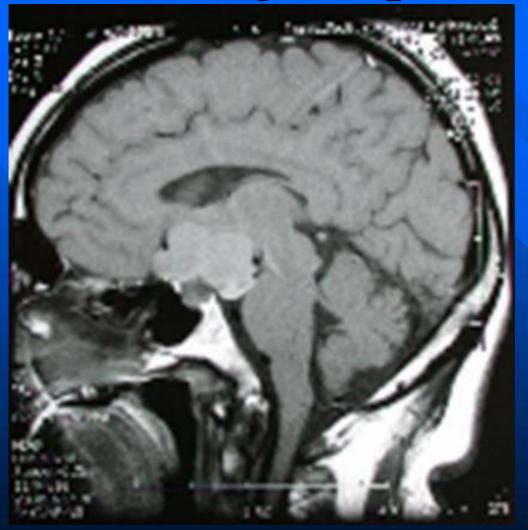
Laboratory data

□ 3/26 HGH 0.12 ng/ml (<5) **4/06** Cortisol: 9.3 ug/dl FSH: 25.16 mIU/ml LH: 11.14 mIU/ml Prolactin: 21.74 ng/ml T3: 75 ng/dl T4: 4.7 ug/dl TSH: 0.83uU/ml HGH: 0.5 ng/ml

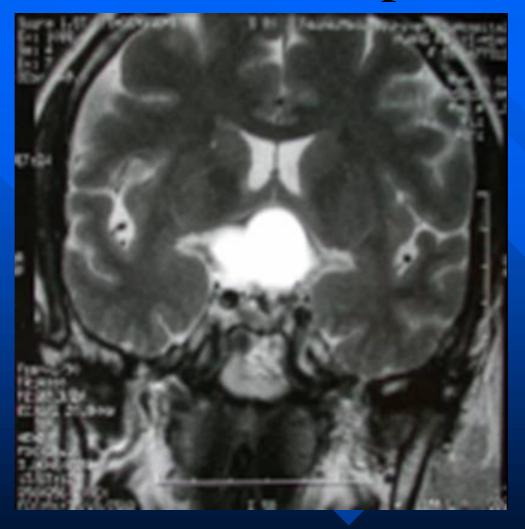
T1WI Coronal plane(3/10)



T1WI Sagittal plane



T2WI Coronal plane



T2WI Axial plane



Radiological findings

- A lobulated mass of isointensity to slightly hyperintensity on T1WI and marked hyperintensity on T2WI at suprasellar region with compression of the optic chiasma.
- The pituitary gland seems intact.

Radiological findings

No apparent signal intensity change of the brain parenchyma

- The ventricles are normal in size and location
- No midline structures deviation

Differential diagnosis

Craniopharygioma
Suprasellar aneurysm
Meningioma
Glioma of optic chiasm or hypothalamus

Craniopharyngioma

- Mostly hyperintense, but also iso or hypointense on T1WI(variable secondary to hemorrhage/cholesterol-containing proteinaceous fluid)
- Markedly hyperintense on T2WI
- Marginal enhancement of solid components with gadopentetate dimeglumine

Suprasellar meningioma

Large mass isointense to gray matter on T1WI and T2WI

Hyperintense flattened pituitary gland within floor of sella.

Marked homogeneous enhancement on T1WI.

Suprasellar aneurysm

Slightly hyperintense mass with homogeneous enhancement.
May have rim calcification and contain a low-density thrombus.

Glioma of optic chiasm or hypothalamus

Isointense or slightly hypointense on T1WI.
Hyperintense on T2WI.

Impression: Craniopharyngioma



3/29 operation
 craniotomy+removal pituitary fossa tumor
 DI developed and DDAVP was given

2001/4/04 S/P OP CT



CT finding

- S/P right craniotomy
- Residual suprasellar tumor with hyperdensity at right side is noted.
- □ The ventricles are normal in size and location.
- No midline structures deviation
- Imp:S/P residual tumor at right suprasellar area.

Pathologic report

□ 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.

Craniopharyngioma

Craniopharyngioma is thought to be derived from vestigial remnants of Rathke pouch. These slow-growing tumors account for 1% to 5% of intracranial tumors. Children usually come to clinical attention because of endocrine deficiencies. Adults usually present with visual disturbances.

Radiological findings

Skull film: 1. extensive sellar destruction 2. curvillinear or stippled calcifications

CT: 1. multilobulated inhomogeneous suprasellar mass with solid and cystic component
2. enhancement of solid component, peripheral enhancement of cystic lesion
3. marginal hyperdense lesion due to calcification
4. may extend into middle or anterior or posterior cranial fossa MR: 1. Mostly hyperintense, but also iso or hypointense on T1WI (variable secondary to hemorrhage or cholesterol-containing proteinaceous fluid)
2. Markedly hyperintense on T2WI
3. Marginal enhancement of solid components with gadopentetate dimeglumine

 Angiography: 1. usually avascular
 2. lateral displacement, elevation and narrowing of supraclinoid of segment of ICA