

BACKGROUND

Sellar masses can be presented with **neurologic symptoms**, abnormalities related to under or oversecretion of **pituitary hormones**, or as an **incidental finding** on radiologic examination performed for some other reason.

Pituitary adenomas are the most common cause of sellar masses from the third decade on, accounting for up to 10 percent of all intracranial neoplasms . Other disorders, which are often difficult to distinguish from pituitary adenomas by imaging, include physiologic enlargement of the pituitary and benign and malignant tumors.

Impaired vision is the most common symptom that leads a patient with a nonfunctioning adenoma, of which over 80% are gonadotroph adenomas, to seek medical attention.

Visual impairment is caused by suprasellar extension of the adenoma, leading to compression of the optic chiasm. The most common complaint is diminished vision in the temporal fields (bitemporal hemianopsia).

Other neurologic symptoms that may cause a patient with a sellar mass to seek medical attention include:

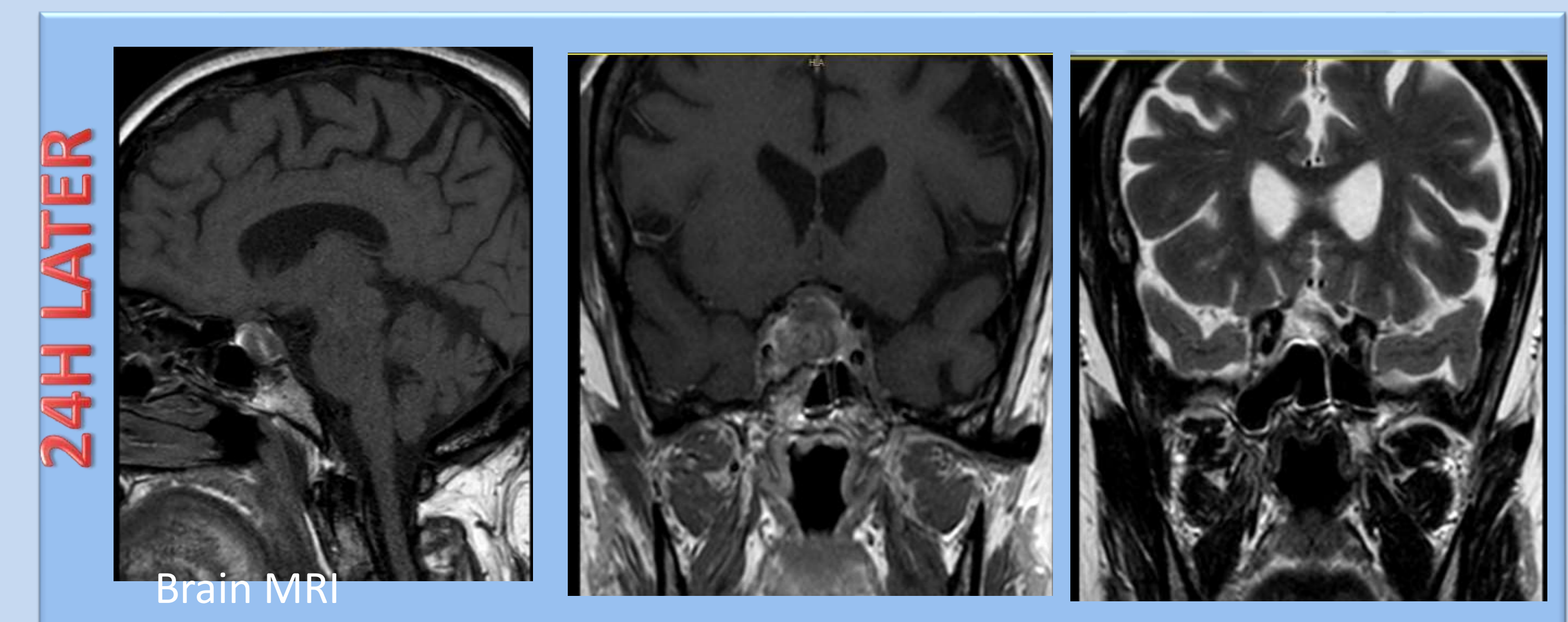
- Headaches, presumably caused by expansion of the sella. The quality of the headache is not specific.
- Diplopia, induced by oculomotor nerve compression resulting from lateral extension of the adenoma.
- Cerebrospinal fluid rhinorrhea, caused by inferior extension of the adenoma, an extremely uncommon presentation.
- Parinaud syndrome, a constellation of neuro-ophthalmologic findings (most often paralysis of upward conjugate gaze), that result from ectopic pinealomas. (See "Supranuclear disorders of gaze in children", section on 'Parinaud syndrome'.)
- Pituitary apoplexy induced by sudden hemorrhage into the adenoma, causing excruciating headache and diplopia

CASE

56 years old woman, smoker, who suffers from hypertension and diabetes mellitus tipo 2, and came to the emergency department because of **headache** in the last 3 days that had worsen in the last 12 hours. **Ocular pain** in the right eye and **vomiting** were also present.

She presents haemodynamic stability. While in the waiting room, ocular pain got worse and **miosi and ptosi** appeared. She also presented **III cranial nerve paralysis**. **Analgesia was ineffective**.

Angio-CT cranial detected a growing intrasellar lesion, with signs of active bleeding. Cranial magnetic resonance revealed **hipofisary apoplexy**.



CONCLUSION

Pituitary apoplexy is caused by **hemorrhage or infarction of the pituitary gland** in the setting of a pituitary adenoma.

Clinical presentation

From relatively mild symptoms to more severe symptoms including:

- | | |
|---------------------------|---------------------------|
| - Acute headache | - Change in mental status |
| - Ophthalmoplegia | - Adrenal crisis |
| - Decreased visual acuity | - Coma |
| | - Sudden death. |

Pituitary apoplexy can present with TCH in patients who have normal physical examinations, head CT scans, and cerebrospinal fluid analyses. Pituitary tumors that are isodense to normal brain tissue may be easily overlooked on CT studies, even if hemorrhage is present. Brain MRI has a much higher sensitivity than CT for detecting the tumor and associated blood.

Headache is one of the most prevalent symptoms in emergency departments, that is why the knowledge of alarm symptoms is especially relevant. The main challenge lies in reaching a correct diagnosis to propose us the most appropriate therapeutic strategy for the patient.

AT THE EMERGENCY ROOM

