



INTRODUCTION: Pituitary adenomas are one of the common neoplasms of the CNS [1]. They are classified by size into micro- and macro-adenoma and according to hormonal activity as functional and non-functional adenomas. When there is a hemorrhage within a pituitary adenoma a pituitary apoplexy occurs. It can be asymptomatic (10-22%) or symptomatic (0.6-9%) causing headache, acute visual disturbances or derangement of vigilance [2].

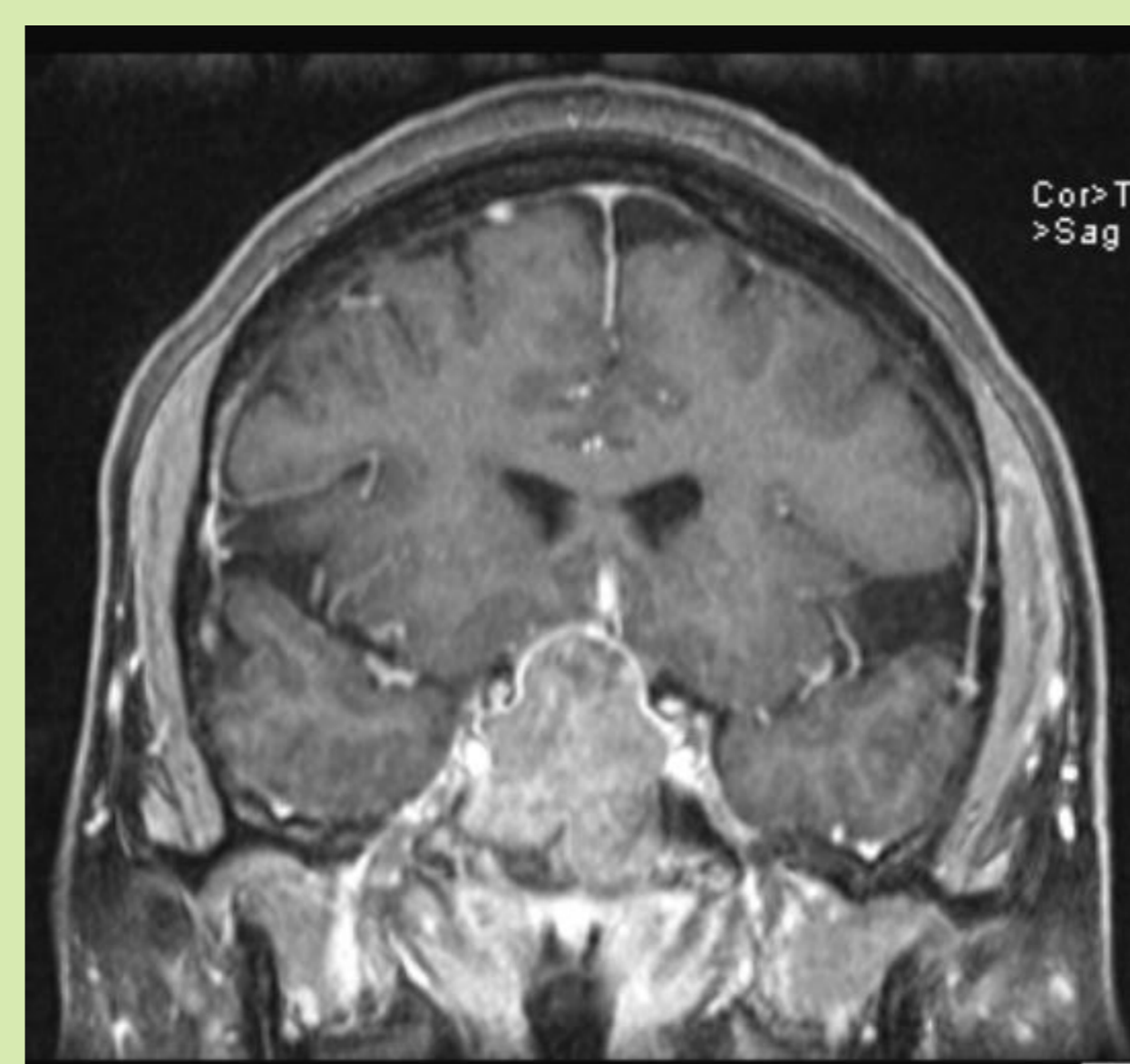
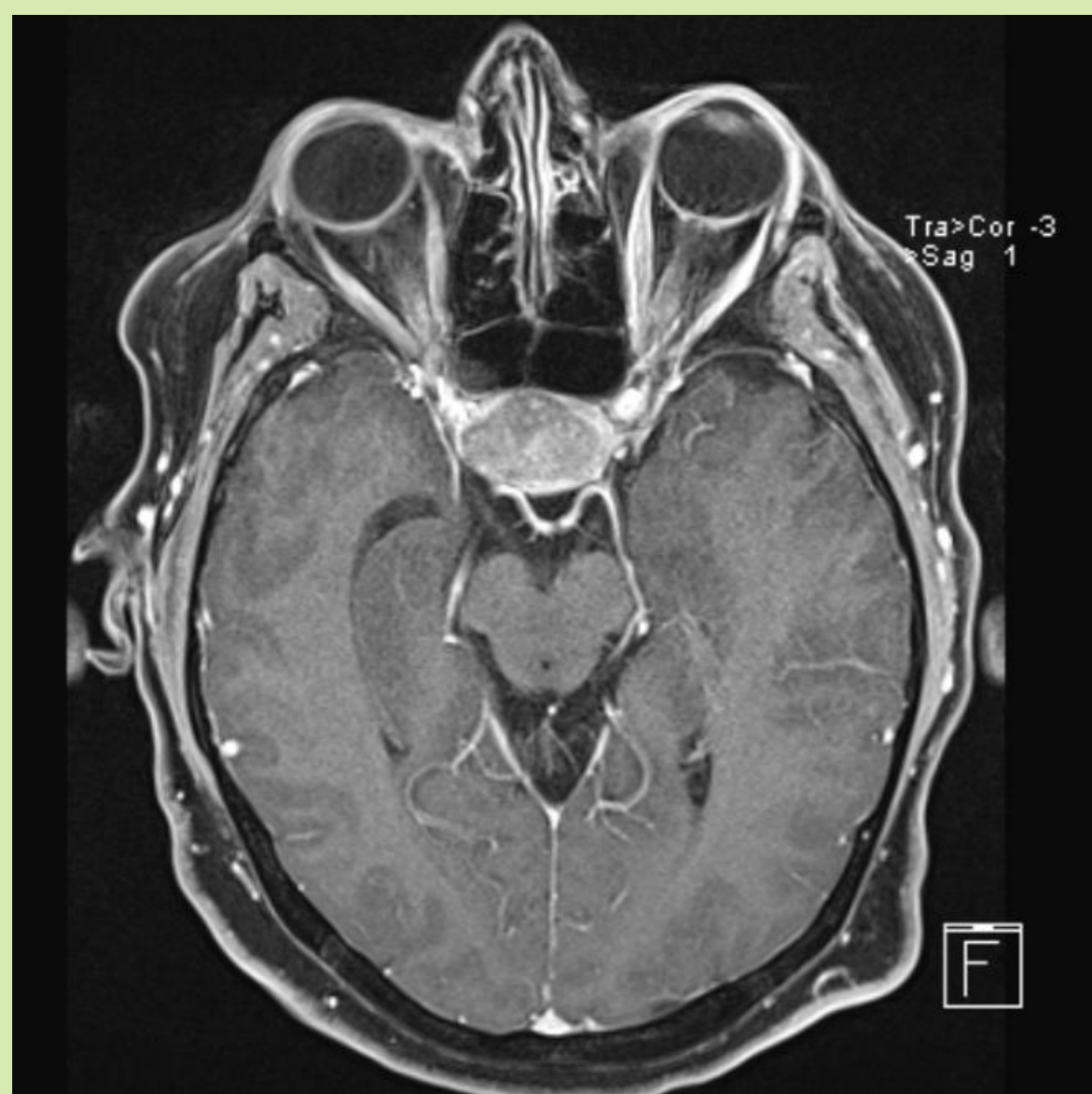
OBJECTIVE: To describe a case of pituitary apoplexy secondary to macroadenoma.

CLINICAL CASE

•A 42-year-old woman went to emergency department for the appearance of frontal constrictive headache, nausea and vomit, associated, after few days, with confusion, slowness and difficult in speaking. Her history was positive for oligomenorrhea and subsequent amenorrhea. Vital signs and neurological examination were normal, except for hyperpyrexia. She had a cushingoid aspect and was obese. Blood samples revealed increased level of white count cells (24000/mm³), prevalent neutrophils, and elevated level of C-reactive Protein. Considering fever and leukocytosis, an infectious process was suspected.

- **CSF analysis:** WBC 1365/mm³, Proteins 34 mg/dl, Glucose 60 mg/dl, glucose CSF/glucose blood ratio 0.56.
- CSF cultures: negative
- Blood cultures: positive for *S. Pneumoniae*.

- A brain CT showed the presence of a pituitary macroadenoma, with intralesional hemorrhage, broadening in the right sphenoidal and both cavernous sinuses. Anterior cerebral arteries and anterior communicating artery were displaced upward.



- The aspect of pituitary apoplexy was confirmed at brain MRI.

- ENT evaluation with fibroscopic scan: in the right spheno-ethmoidal recess, presence of haematic mucus.
- Visual field was normal.
- Endocrinologic evaluation: diabetes mellitus and hypothyroidism, but other pituitary hormone levels were in ranges.
- Fever and leukocytosis in CSF improved after 2 weeks of antibiotic treatment.
- The patient underwent a transsphenoidal intervention and the pathological examination confirmed the presence of macroadenoma.



DISCUSSION

The presence of meningeal irritation signs and fever in pituitary apoplexy has been documented in the past literature [3]. Nevertheless, neutrophilic pleocytosis in pituitary apoplexy, due to the leakage of blood and necrotic tissue into the subarachnoid space, may lead to the misdiagnosis of infectious meningoencephalitis. It is important to include pituitary apoplexy in the differential diagnosis if the patient presents with an acute headache associated with fever. Highly clinical suspicion with appropriate investigations are the cornerstones of diagnosing pituitary apoplexy.

REFERENCES

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