# ¿No es una trombosis cerebral? Un macroadenoma hipofisario con una presentación inusual

Not a stroke? A Pituitary Macroadenoma with an unusual presentation

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### **ABSTRACT**

We present the case of a 66 year-old male, no medical history, presenting with facial palsy, dysphagia and right hemiparesis and hemihypostesia. Neurological examination also showed left eye ptosis. Stroke was first suspected. In head-CT and angio-CT scans image compatible with macroadenoma are seen. These kind of neurological defficits are not usual with theses lesions which present with headache and visual disturbances. Stroke diagnosis and treatment should be prompt. This should't however mislead us to be precipitous and ignore differencial diagnosis. Pituitary macroadenomas usually present with headaches and visual disturbances but this is not always the case as this report shows us.

Keywords: pituitary macroadenoma; stroke mimic; differential diagnosis

Palabras Clave: macroadenoma hipofisario; imitador de trombosis cerebral; diagnóstico diferencial

# INTRODUCTION

Most patients with pituitary adenomas have symptoms and signs related to hormone production. However, about 25 to 30% of adenomas are non-secretory, among which, in 70 to 90% of cases, gonadotrophinomas are found¹. When symptoms are related to adenoma growth, because of its location, they usually include visual field changes².3,4. In the clinical case described, the presentation of this gonadotrophinoma is in the form of stroke mimic, with a very typical presentation of an ischemic stroke in the territory of the left middle cerebral artery. With the exception of a left ptosis, the remaining signs are extremely frequent and include dysphagia, deviation of the labial commissure and right hemiparesis and hemihipostesia. Although brain tumors are a differential diagnose for stroke, pituitary macroadenomas are not the most frequent⁵.

# **CLINICAL CASE**

We present the case of an 66-year-old man, autonomous, ex-smoker and with a history of peripheral venous insufficiency. Usually medicated for low back pain with analgesics, without other medication or known allergies. In the morning he noticed difficulty in drinking water which motivated search for medical care. He was observed by a General Practitioner. In the neurological examination, he presented partial left facial palsy and right hemiparesis and hemihyposthesia, so he was referred to the Emergency Room (ER) for diagnosis of stroke. Neurological deficits were confirmed, an head-CT and angio-CT scans were performed which did not show images of infarction or large vessel oclusion but an image compatible with pituitary macroadenoma was seen (Figures 1 and 2). The case was discussed with Neurorradiology and Neurossurgery centers and a differential diagnosis between ischemic stroke without image translation or minor bleed from macroadenoma. Taking into account the evolution time (greater than

4.5 hours) and this second diagnostic hypothesis there were no criteria for fibrinolysis and it was decided not to start anti-aggregation. Patient was transferred to Neurosurgery service. In this service, he underwent CE-MRI that confirmed pituitary macroadenoma. After the initiation of corticosteroid therapy, the deficits improved. Transfenoidal biopsy was performed and the histology was compatible with gonadotrophinoma. The patient is still in follow-up, mantains left ptosis and left facial palsy. Taking into account the hormonal assays performed, he maintains therapy with corticotherapy and levothyroxine.

### DISCUSSION

We present the case of a gonadotrophinoma with an unusual presentation. The most frequent symptoms in these cases are headache and visual disturbances due to the growth of the lesions or symptoms related to hormone secretion<sup>1,2,3</sup>. Not all focal neurological deficits are strokes. In the emergency department, the need to diagnose strokes as quickly as possible in order to initiate targeted treatment can divert our focus and lead to errors in diagnosis<sup>6</sup>.

Differential diagnoses should always be excluded, especially when the neurological deficits don't quite correlate with an area of ischemia/infarction or a vascular territory in the brain. This requires expertise and practice<sup>7,8</sup>.

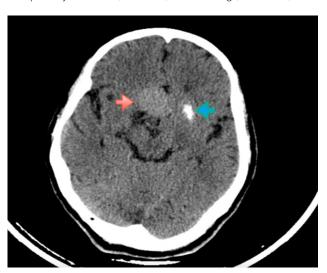
## **Learning Points**

Stroke diagnosis and treatment should be prompt. This shouldn't however mislead us to be precipitous and ignore differential diagnosis. Pituitary macroadenomas usually present with headaches and visual disturbances but this is not always the case as this report shows us.

Figure 1 - CT scan showing round hypodense image above sellar space (red arrow) suggestive of pituitary macroadenoma.



Figure 2 - CT scan, 10mm above Figure 1, showing upper portion of pituitary adenoma (red arrow) and bleeding (blue arrow).



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There is no funding related to this clinical case.

#### CONFLICT OF INTEREST

The authors don't have conflicts of interest to declare.

#### **ETHICAL ASPECTS**

All participants submitted a consent form to be included in this study.

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