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Case Report

Pituitary Apoplexy, an Endocrinological Emergency: Case Report

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ABSTRACT

Pituitary apoplexy is a rare endocrine emergency that can occur due to bleeding or ischemia in the pituitary gland. Its incidence can vary between 0.6% and 16.8% in the general population (2-7% in pituitary adenomas). We herein report an unusual case of a 50-year-old female patient who presented to the emergency with complaints of left hemicranial headache, cervicalgia, shoulder pain and dizziness for 1 year worsened in the last three days. Her prolactin levels were high, and the first imaging exam suggested a silent apoplexy, since the clinical picture of the patient did not indicate such condition. In the second one, the patient presented a typical picture of apoplexy, including intense headache and nausea. Her temporal evolution suggested a macroprolactinoma with hemorrhagic degeneration or apoplexy. As she did not present signs of indication for transsphenoidal emergency surgery, conservative treatment was chosen. In this case, due to history of repeated apoplexy, nausea and intense headache, it is important to keep close monitoring for an eventual urgent surgical intervention in case of new bleeding, visual alterations and/or reduced level of consciousness, since these are indicative signs for transsphenoidal emergency surgery.

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Case Presentation

Z.S.P.G female, 50-year-old, presented to the emergency with complaints of left hemicranial headache, cervicalgia, shoulder pain and dizziness for 1 year worsened in the last three days. On physical examination, no neurological abnormalities. Campimetry was performed, with normal results. Hormonal exams were normal, except for the prolactin levels (120ng/ml). Magnetic resonance imaging (MRI) (Figure 1) and computerized tomography (CT) were requested, which demonstrated a pituitary tumor with bleeding. Cabergoline was started. One year later, with normal prolactin levels, she stopped using cabergoline. After three months, she presented nausea, peak blood pressure (160/100mmHg) and intense headache, and so dihydroergotamine was prescribed. A new MRI indicated a lesion measuring 24x22x20mm, with slight growth, suprasellar extension and compression of the optic chiasm, suggesting hemorrhagic degeneration or apoplexy.

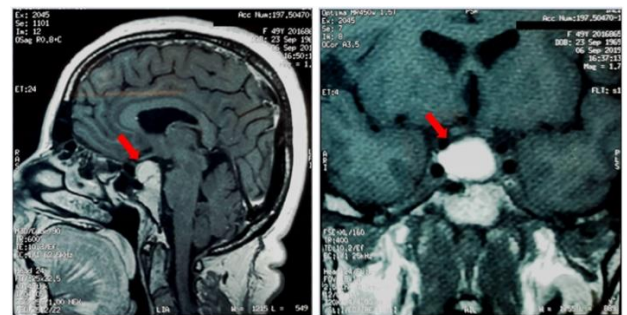


Figure 1: Magnetic resonance imaging (MRI) in sagittal and coronal section showing bleeding (red arrows) inside the sella turcica.

Discussion

The temporal evolution of the patient suggests a macroprolactinoma with hemorrhagic degeneration or apoplexy. Pituitary apoplexy is a rare endocrine emergency that can occur due to bleeding or ischemia in the

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pituitary gland [1-3]. Its incidence can vary between 0.6% and 16.8% in the general population (2-7% in pituitary adenomas) [4]. In this case, a dopaminergic agonist was used for the treatment of the tumor, which successfully controlled the headache and the prolactin levels. The first MRI suggested a silent apoplexy, since the clinical picture of the patient did not indicate such condition. In the second one, the patient presented a typical picture of apoplexy, including nausea and intense headache [4]. The hormonal exams were stable, which suggested a possible action of the apoplexy itself on the tumor, stabilizing the hormonal secretion. Once the patient did not present signs of indication for transsphenoidal emergency surgery (visual defects and/or reduced level of consciousness), conservative treatment was chosen [1].

Conclusion

Pituitary apoplexy may have spontaneous improvement with conservative therapy [5]. In this case, due to history of repeated apoplexy, nausea and intense headache, it is important to keep close monitoring for an eventual urgent surgical intervention in case of new bleeding, visual alterations and/or reduced level of consciousness, since these are indicative signs for transsphenoidal emergency surgery [1, 4, 6, 7]. It is important to highlight the relevance of continuing conservative therapy in order to avoid invasive procedures and possible sequelae.

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