

Bursting lesion in a confined space

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Introduction

Pituitary apoplexy (PA) is a rare but potentially life-threatening condition arising from hemorrhage or infarction or tumor of pituitary gland. Headache is often the primary presenting symptom and serves as early indicator of a pituitary tumor before it ruptures into suprasellar region. This case aims to highlight the importance of complete eye examination when the patient presents with persistent headache as it may be missed during first visit.

Case Description

49-year-old gentlemen presented with persistent frontal headache for six days associated with non-vertiginous dizziness and nausea and not resolved by analgesia. He also had blurring of vision and discomfort over the left eye. He sought treatment at a private clinic on the second day of illness, but his symptoms were not resolved. Thus, he went to the emergency department for further evaluation. He was alert, conscious and well-hydrated. His vital signs were normal. His pupils were reactive. His left eye turned upward and was laterally deviated. The visual acuity of his right eye was 6/24 while his left eye could only perceive hand movements. Other cranial nerves were normal. There were no other neurological deficits except broad based gait. The blood investigations revealed all within normal range. Urgent plain and contrasted brain CT scan (as shown in Figure 1) was done and revealed a large sellar mass with suprasellar extension associated with intrasellar hemorrhagic component causing mass effect, with the lesion suggesting pituitary macroadenoma complicated with apoplexy. In view of his persistent headache and visual disturbance, immediate decompressive pituitary surgery was done.

Discussion

Diagnosis of PA depends on clinical symptoms, thorough physical examination and neuroimaging findings. The most common symptoms are headache that comprises more than 80% of the cases, visual disturbances (39% of the cases), and nausea (36% of the cases). It may present with hypopituitarism due to rapid decline of pituitary function such as vascular collapse due to decreased level of ACTH and cortisol, but it occurs only in 55% of the cases.

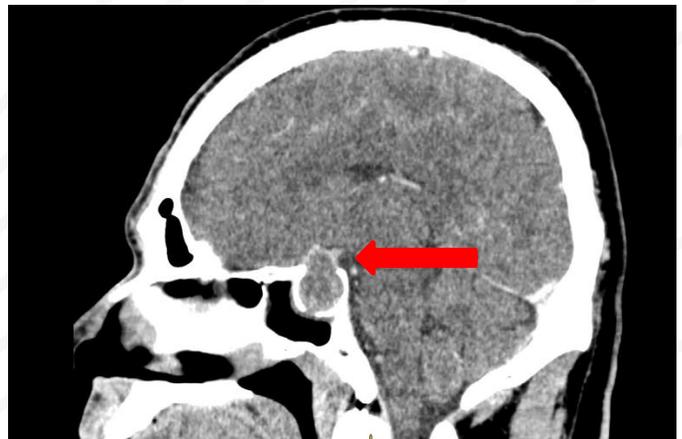


Figure 1: Lesion as shown at arrow

Conclusion

Headache is a red flag symptom that may indicate a life-threatening condition. A thorough eye examination is essential to determine the need for further neuroimaging in diagnosing PA.

References

1. Claire Briet, Sylvie Salenave, Jean-François Bonneville, Edward R. Laws, Philippe Chanson, Pituitary Apoplexy, *Endocrine Reviews*, Volume 36, Issue 6, 1 December 2015, Pages 622–645, <https://doi.org/10.1210/er.2015-1042>
2. Falhammar H, Tornvall S, Höybye C. Pituitary Apoplexy: A Retrospective Study of 33 Cases From a Single Center. *Front Endocrinol (Lausanne)*. 2021 Apr 15;12:656950. doi: 10.3389/fendo.2021.656950. PMID: 33935971; PMCID: PMC8082680.

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