

## Pituitary Apoplexy Causing Permanent Blindness after Cardiac Bypass Surgery

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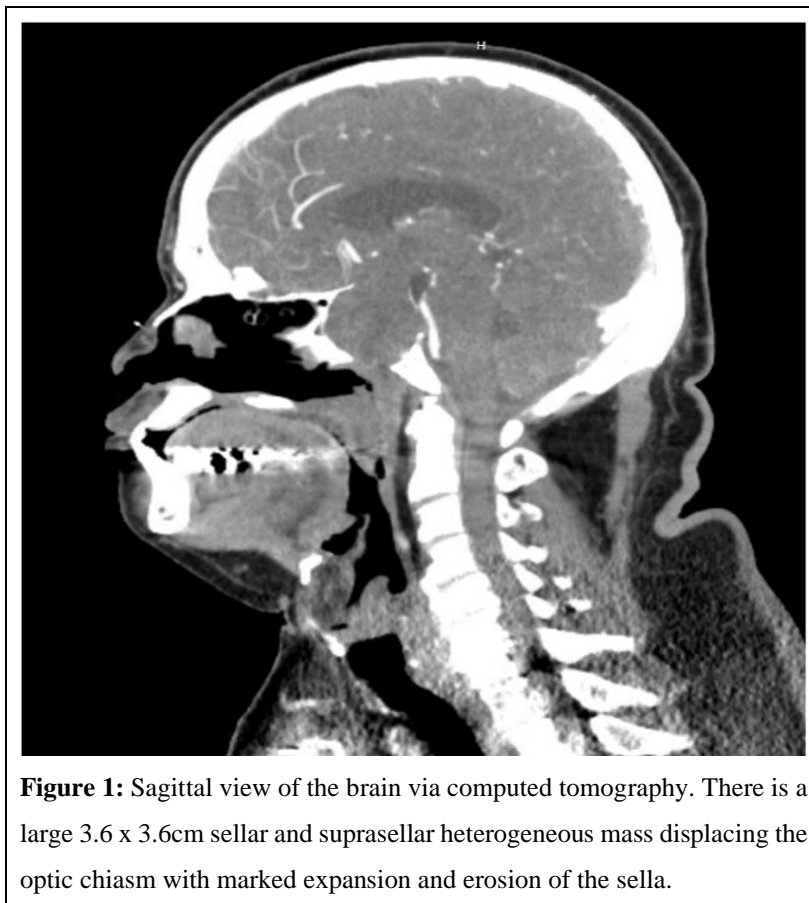
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**Figure 1:** Sagittal view of the brain via computed tomography. There is a large 3.6 x 3.6cm sellar and suprasellar heterogeneous mass displacing the optic chiasm with marked expansion and erosion of the sella.

## **Clinical Image**

A 61-year-old male with diabetes, hypertension, obstructive sleep apnea, presented with chest pain. Cardiac catheterization showed multivessel disease. He underwent cardiac bypass surgery with no hemodynamic complications. Afterwards, he awoke with no light perception vision. Otherwise, he had a completely intact neurological exam and denied other symptoms. CT Brain revealed 3.6cm sellar and suprasellar heterogenous mass displacing the optic chiasm with marked expansion and erosion of the sella, consistent with pituitary macroadenoma and high suspicion for hemorrhagic infarction (Figure 1). He was emergently transported to a tertiary care center for transsphenoidal resection. To this day, he has not recovered his vision. Although rare, the dynamics of cardiopulmonary bypass can contribute to sudden expansion of silent pituitary adenomas. Numerous factors may be responsible: hypotension, hypoxia, cerebral hypoperfusion, microembolism [1]. Transsphenoidal decompression leads to improved visual outcomes [2]. However, total blindness can occur when hemorrhage from extensive pituitary adenomas affects the optic nerves and optic chiasm [3]. This patient's case is unique in that his only symptom was complete loss of vision without headache, confusion, nausea, and vomiting; and despite surgical intervention he never recovered his vision and has been rendered permanently blind which appears to be a much different outcome from other reported cases. Physicians should be aware that pituitary apoplexy is a rare complication after cardiac bypass surgery and can cause permanent, devastating damage. Therefore, neuroimaging should be considered for patients before cardiac surgery to rule out silent pituitary adenomas because of the risk of pituitary apoplexy and its potential life-altering injury after cardiac surgery.

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