

Unmasking the Uncommon: A Case of Giant Pituitary Adenoma Presenting with Altered Mental Status



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INTRODUCTION

- Giant pituitary adenomas are larger than 40 mm at largest diameter, and are typically functioning adenomas that cause mass-effect symptoms
- Clinical presentations of these adenomas vary widely and may be nonspecific, requiring a high index of suspicion.

IMAGING

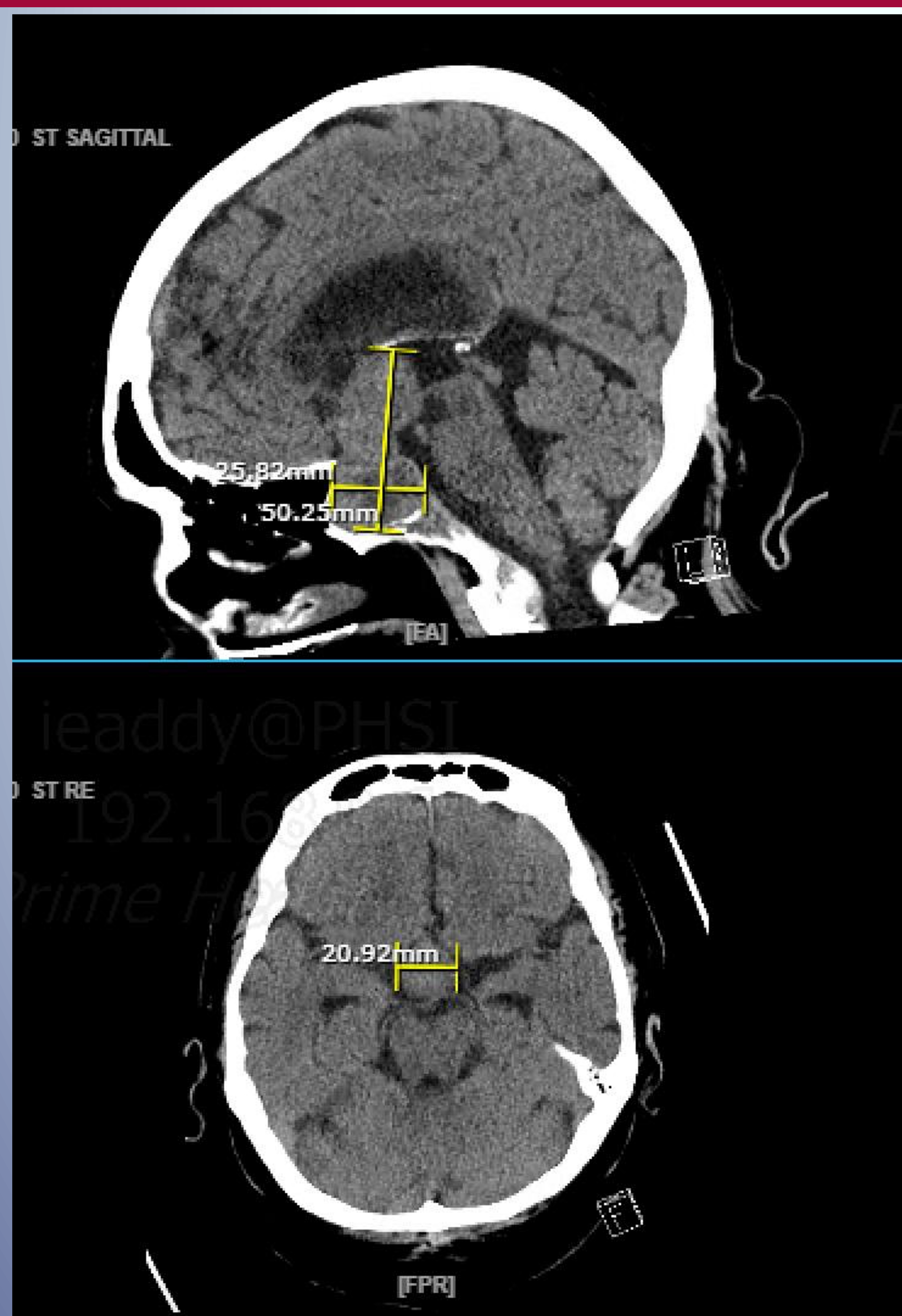


FIGURE 1. A 2.1 x 5.0 x 2.6 cm macroadenoma imaged on CT head without contrast, seen in sagittal (A.) and transverse (B.) views.

CASE DESCRIPTION

- The authors present a 72-year-old female with hypertension, heart failure, hyperlipidemia, Type II diabetes mellitus and multiple sclerosis in remission who presented to the emergency room with nausea, malaise, and change in mental status

The patient was initially treated for a UTI, with some improvement. When mentation improved, patient developed episodes of hypoglycemia, however was able to participate and relay possible peripheral vision defects.

The patient showed signs of altered mental status.

Cortisol testing was inconclusive, and physical exam remained nonfocal. Computed tomography revealed a large pituitary lesion. Further imaging confirmed and further characterized the lesion as a giant (3.7 x 5.1 cm) invasive pituitary adenoma with extensive involvement of the clivus and extension into the third ventricle.

The patient was transferred to a tertiary care facility, where an endoscopic transsphenoidal resection of the pituitary macroadenoma was performed by both otolaryngology and neurosurgery teams without complication.

Immunohistochemistry of the surgical pathology revealed chromogranin, synaptophysin, and minimal ACTH-positive staining pituitary adenoma cells, confirming the diagnosis of a pituitary adenoma.

RESULTS & DISCUSSION

- This case details a 72-year-old female who presented to a community hospital with nonspecific symptoms including nausea and progressive visual deterioration.
- When her mental status rapidly declined, she underwent repeat brain and sinus imaging that revealed a uniquely large, non-functioning pituitary adenoma prompting transfer to a tertiary care center for surgical resection.

CONCLUSION

- This case emphasizes the importance of thorough investigation for causes of altered mental status beyond age-related or hospital-related delirium.
- The unique diagnostic challenge and interdisciplinary management highlight the need for a comprehensive approach to uncover uncommon etiologies in complex clinical presentations.

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