

CASE SERIES OF THREE PATIENTS WITH GIANT PROLACTINOMA REQUIRING MULTIMODAL THERAPY

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INTRODUCTION:

A giant prolactinoma (GP) is defined as pituitary adenoma with diameter 4cm or more, with extra-sellar extension causing clinical symptoms and serum prolactin (PRL) >1000ug/l (21 000mIU/L). This rare pituitary macroadenoma represents about 4% of prolactinomas, can be highly invasive, often presenting with acute neurological complications and might require multimodal therapy apart from dopamine agonists (DA).

OBJECTIVES:

We describe presenting clinical and radiological features, therapeutic management and clinical response of 3 cases with GP.

METHOD:

Retrospective data collection of three cases with GP encountered in the past one year.

RESULTS:

All three patients were men aged between 23 to 55 years, presenting with severe headache and visual disturbance. One patient presented with meningitis followed by incidental finding of large sellar mass. The tumor size ranged from 4.0 to 6.0 cm in diameter with baseline PRL 42 553 to 988 346mIU/L. All three patients were on DA, cabergoline (CBG). One patient had surgery prior to DA whereas two other cases required surgical intervention following medical therapy for CSF leak and worsening visual impairment respectively. Two patients responded well to DA whilst the other one patient required chemotherapy, temozolamide for persistent hyperprolactinemia with residual macroadenoma after two surgeries and high dose CBG 7.5mg/week, which successfully reduced PRL and tumor size significantly. All three had secondary hypothyroidism, secondary adrenal insufficiency and secondary hypogonadism, with diabetes insipidus in two patients.

CONCLUSION:

These three cases illustrate the challenges and complexity of management of GP and emphasize the need for multidisciplinary management and multimodal treatment.