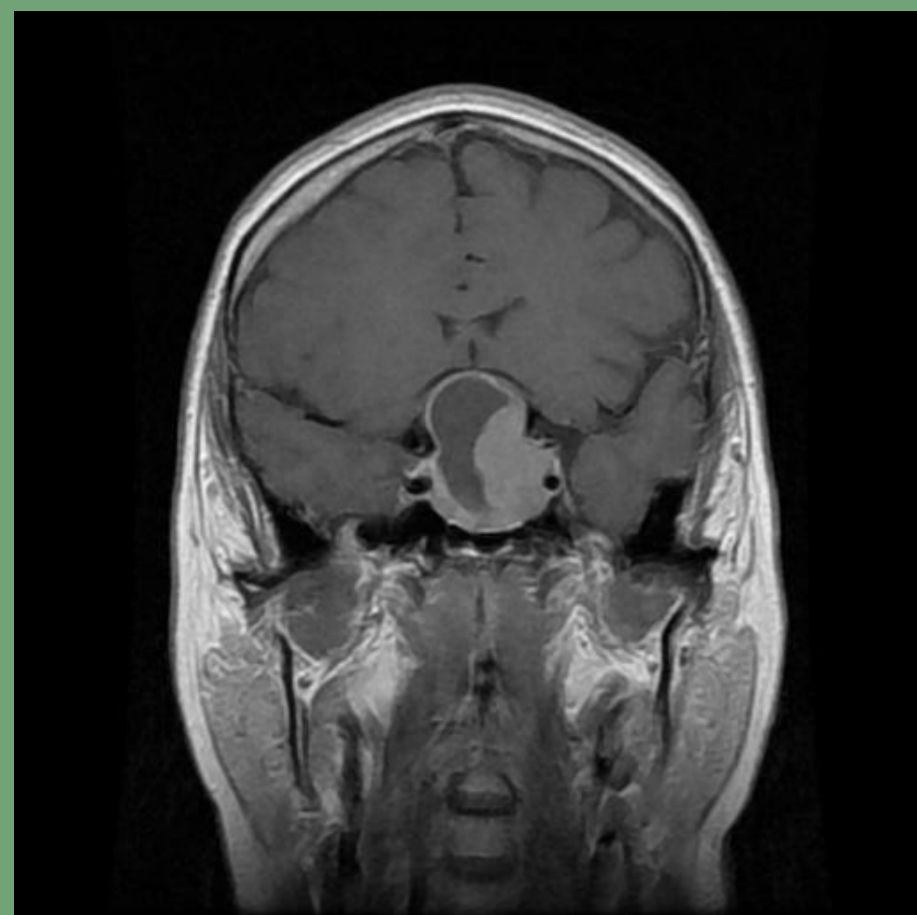


Introduction

"Invasive giant prolactinoma" is a large prolactinoma (>4 cm in dimension) presenting with serum prolactin levels of >1000 ng/dL and mass related clinical symptoms. Giant prolactinomas (GPs) are an unusual subset of macroprolactinomas and are more commonly found in men. Dopamine agonists are the treatment of choice for prolactinomas and surgery is warranted only when the response to medical therapy is poor, not tolerated, or in those with compromised vision or with extensive invasion. It has been suggested that patients with GPs often require larger than the conventional doses of cabergoline with frequent dose escalation for clinical and biochemical response especially with cystic lesions. We describe the two cases of a giant prolactinoma treated with cabergoline alone and next to surgery and gama-knife in two men.

Case 1

- A thirty years old man admitted with headache and visual defect, cranial MRI revealed a invasive giant-adenoma with 50% cystic mass and 47x30x27mm in size. ferred with giant pituitary adenomas on MRI. Prolactin level was > 1000 ng /dl with other tests showed no abnormality other than hypogonadism.



- Cabergoline was started with 1gram per week with twice dosing and was increased up to 3 grams. After three months MRI revealed significant reduction in tumor size (30x22x18mm) with subacute haemorrhagic changes. Prolactin level was down to 25 ng/dl at 3rd month and to 4 ng/dl at 6th month. Hypogonadism findings improved, and visual field showed marked improvement.

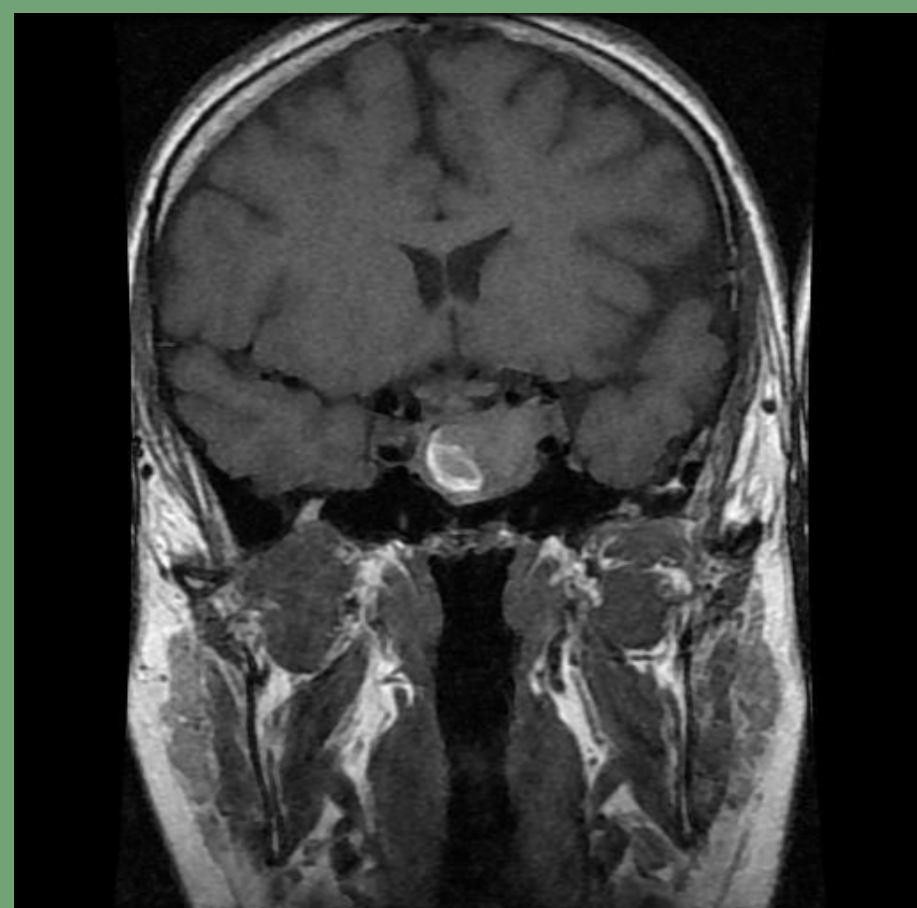
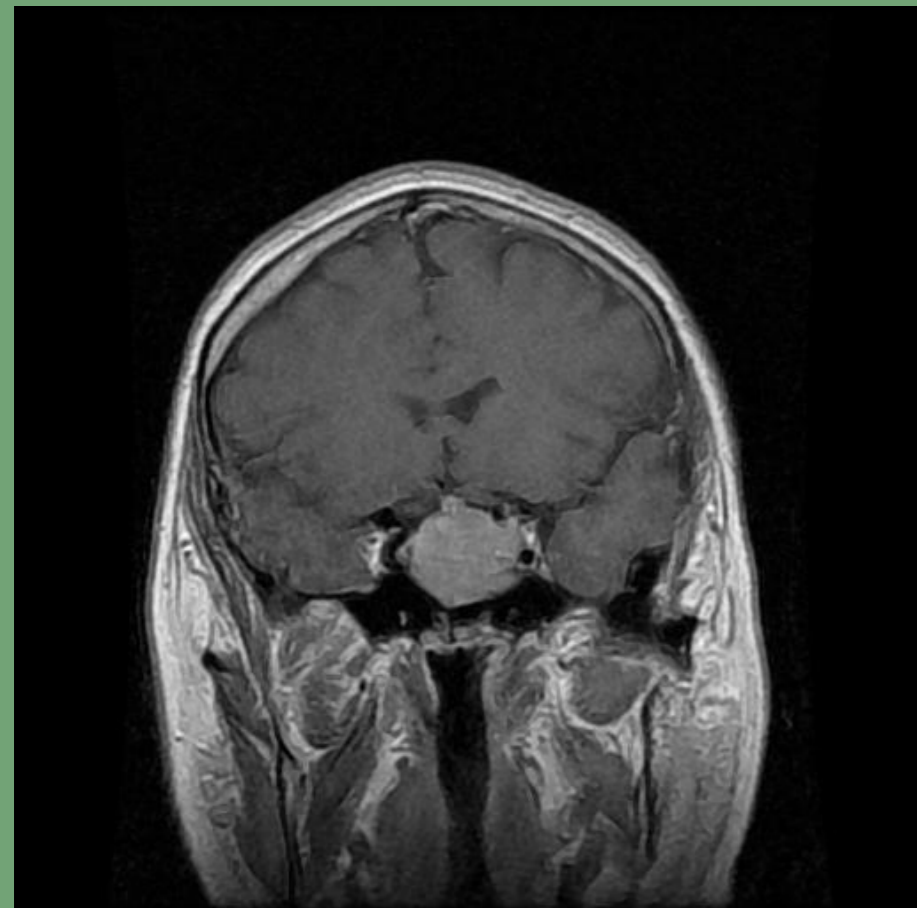
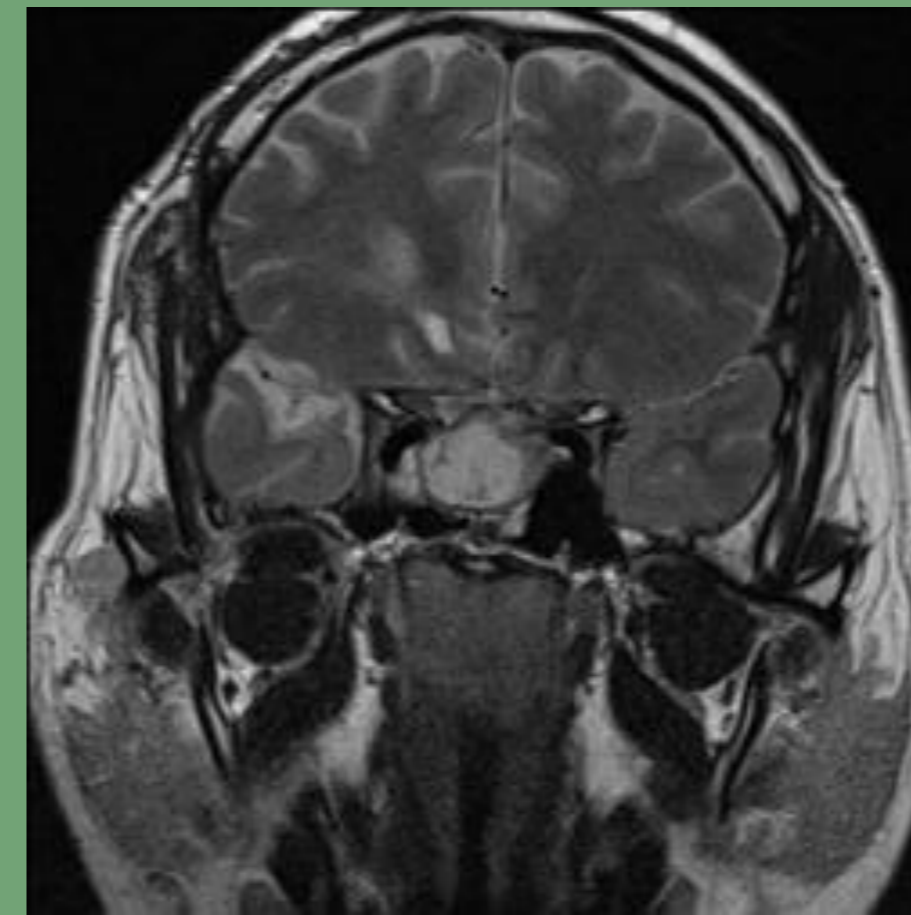


Figure 1: Pre-operative, 6th month and first year. MR images of case 1.

Case 2

- Another man with thirty-four years was evaluated by a neurosurgeon at another institution due to headache and confusion and he was operated due to significant signs of compression with invasive giant-prolactinoma containing large cystic areas and 45x33x20mm in size detected with cranial MRI.



- Cabergoline was started immediately postoperatively with preoperative >1000 ng/ml prolactin level and gama-knife surgery was performed subsequently. In this case MRI findings at 3rd and 6th months were not showed improvement in tumor size and prolactin level was 250ng/ml when admitted to us. Cabergolin dose was increased and prolactine level was down to 4.6 ng/dl after 3 months

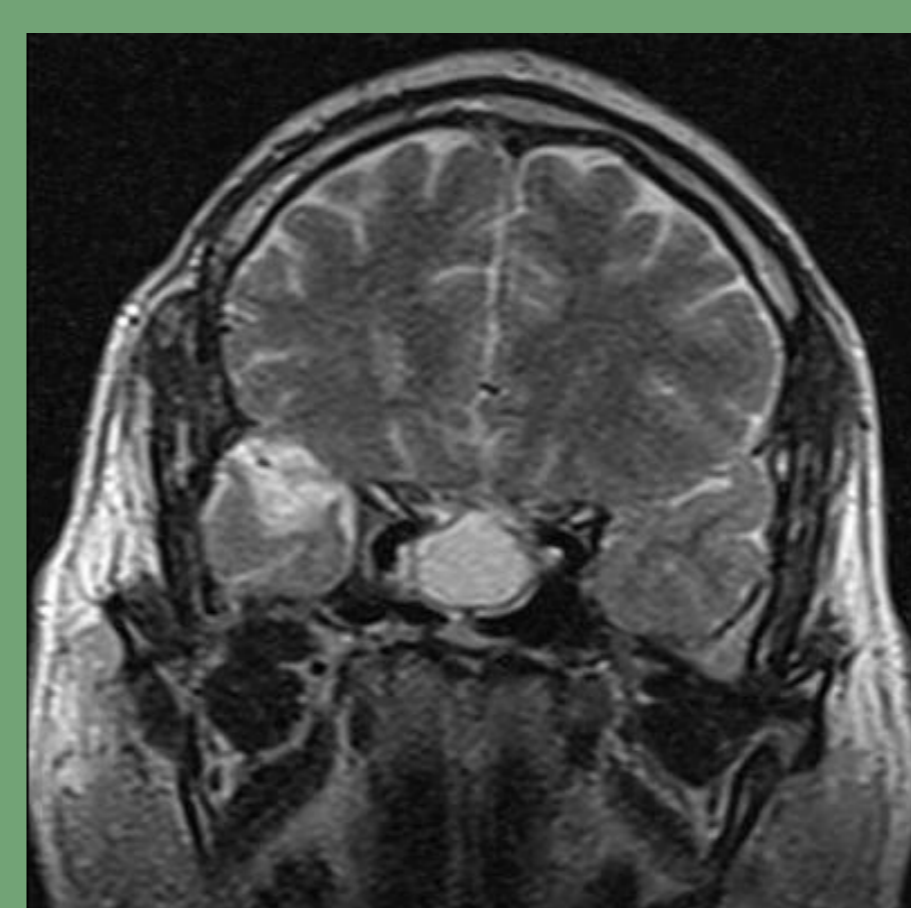
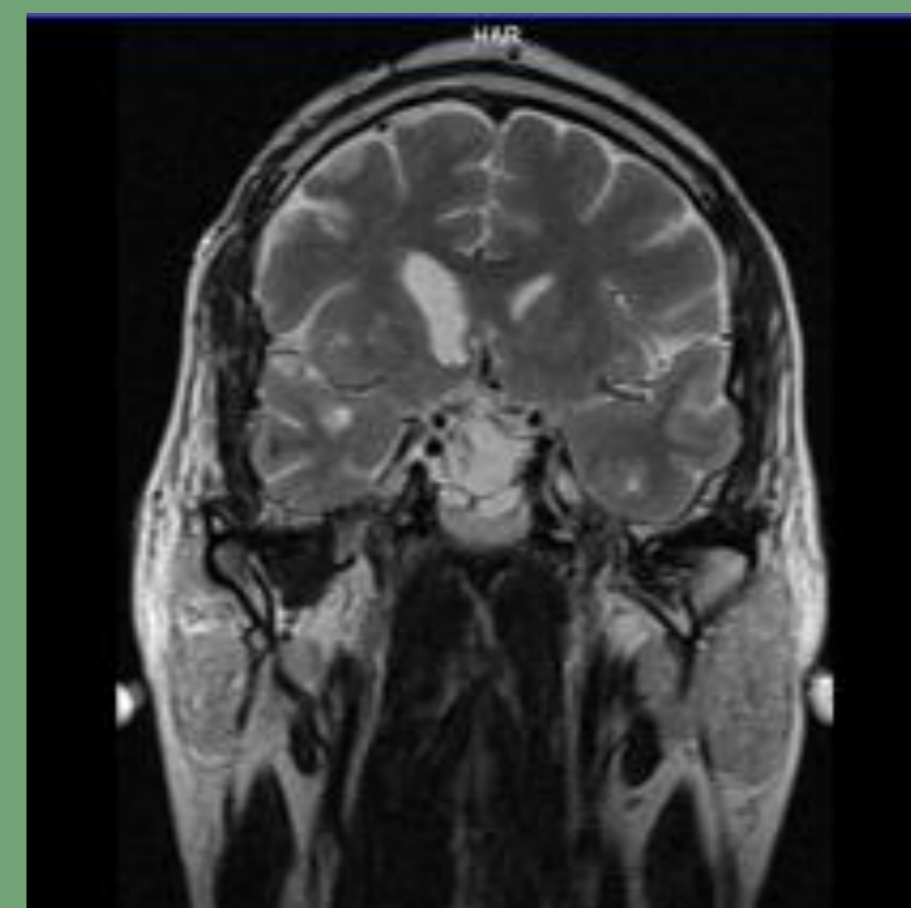


Figure 2: Pre-operative, 6th month and first year. MR images of case 2.

Conclusions

In the first case, cabergolin treatment has been effective for giant prolactinoma although containing cystic structures, in the second case it could not improvement in tumor size. Compared to the two cases, can be suggested that early surgical intervention or radiotherapy may have caused this ineffectiveness.