

Rhinorrhea After Cabergoline Treatment for Giant Invasive Macroprolactinoma: A Case Report

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Abstract

Introduction: Rhinorrhea may be seen at giant invasive macroprolactinomas due to dural injury or after medical treatment with dopamine agonists and it may lead to meningitis, intracranial abscess and pneumocephaly (1). We report a case of macroprolactinoma that develops rhinorrhea after cabergoline (CAB) treatment.

Case Report: A 56-year-old male patient was admitted to endocrinology department due to a massive sellar mass after ventriculoperitoneal-shunt insertion at the neurosurgery department due to hydrocephalus. Magnetic resonance imaging (Figure 1) showed an expansive sellar mass measuring 5.7x3.6 cm, eroding the cavernous and sphenoid sinuses and compressing the third ventricle and chiasma. The pituitary profile is seen at Table 1. A diagnosis of giant invasive macroprolactinoma was made and treatment initiated with 0.25 mg of oral cabergoline twice weekly. Patient

was readmitted 2 weeks later with rhinorrhea. CT scan showed no evidence of pneumocephaly or shunt dysfunction (Figure 2). As the risk of tumor re-expansion in case of discontinuation of CAB was high and the leakage was minimal, we decided to continue CAB and follow the patient closely. The rhinorrhea was stopped at the 4th week and didn't occur again.

Discussion: Rhinorrhea is a potential complication of management of invasive prolactinomas (2). Although the standard management is surgical repair in 71% of cases, spontaneous resolution following medical treatment have also been reported (3). In our case, multidisciplinary follow-up was done without surgical intervention and the rhinorrhea was stopped and PRL levels were normalised. In conclusion, when the postoperative panhypopituitarism and other comorbidities due to surgery are considered, follow-up may be an option in these cases.

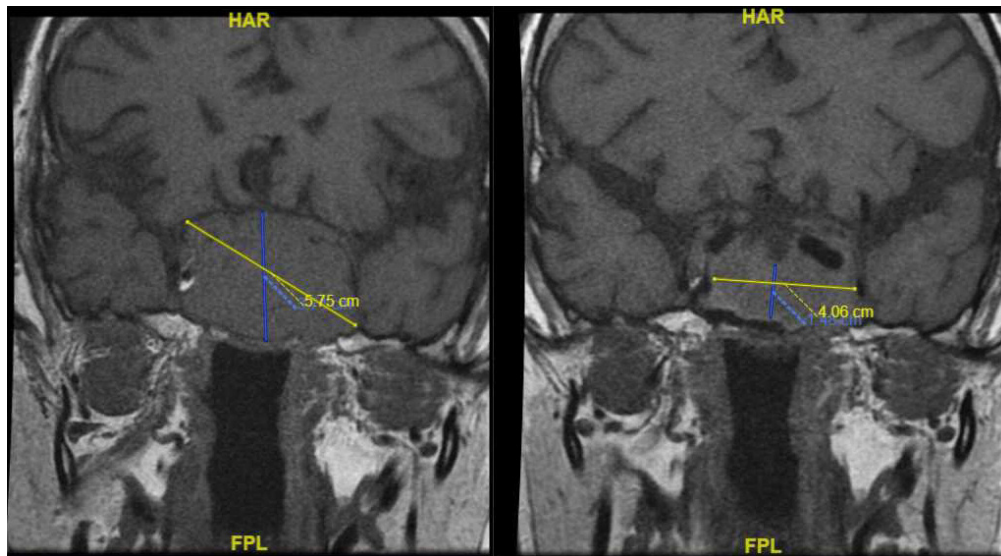


Figure 1. On the left. pre-treatment sella MR and on the right. 3 months after the treatment sella MR image is seen.

Table 1

Biomarker	Value	Normal references
Prolaktin	27846 ng/mL	3-19
GH	<0.05 ng/mL	0.06-5.00
IGF-1	44.9 ng/mL	81.0-225.0
ACTH	17.5 pg/mL	5-46
FSH	0.89 mIU/mL	0.95-11.95
LH	0.8 mIU/mL	0.57-12.07
Serum kortizol (AM)	8 µg/dL	3.7-19.4
Total serum testosterone	0.86 ng/mL	2.2-7.15
TSH	1.237 µIU/mL	0.350-4.940
Serbest T4	1.33 ng/dL	0.70-1.48



Figure 2