



# A Rare Complication of Macroprolactinoma Treatment with Cabergoline: Herniation of Optic Chiasma



Kamil BASKOY<sup>1</sup>, Veysel Özalper<sup>2</sup>, Seyid Ahmet AY<sup>1</sup>, Ferhat DENİZ<sup>1</sup>, Arif YONEM<sup>1</sup>

1.Dep. of Endocrinology, Haydarpaşa Training Hospital, GATA; 2.Dep. of Internal Medicine, Haydarpaşa Training Hospital, GATA, Istanbul/TURKEY

**INTRODUCTION:** Prolactinoma is the most common form of all pituitary tumors, and currently, treatment with cabergoline constitutes first choice therapy for prolactinoma. Surgical approach is recommended when medical therapy fails or visual disturbance due to pituitary mass develops. Here we present a case of macroprolactinoma who developed empty sella and optic chiasm protrusion secondary to cabergoline treatment.

**CASE:** A 20-year-old male patient referred to our clinic, complaining of impotence and infertility. On laboratory investigation, he had an increased level of serum prolactin (1600) and low testosterone (100). His testicular ultrasonography was normal. MRI examination showed a pituitary mass, measuring 25x18x22 mm. The mass replaced the sella and caused optic chiasm depression but caused no visual impairment clinically. The patient was diagnosed with macroprolactinoma and started cabergoline in a dose of 1 mg/weekly. During the 3<sup>rd</sup> month of therapy, prolactin level was decreased (48 IU/ml), there was no sign or symptom attributable to pituitary apoplexy. After 4 months of therapy with cabergolin, there was no visible mass in the pituitary and serum prolactin level was in normal range. Thereafter, cabergoline dose was decreased (0.5 mg/weekly) and he was advised to come for control after 3 months. However, the patient came later than said. His control MRI showed he had still no pituitary mass, but had empty sella and protrusion of optic chiasm into the sellar area. Luckily, he had no clinical sign of visual disturbance. We thought that the protrusion of optic chiasm may be secondary to cabergoline treatment since we had no other explanatory mechanism. During the following controls, there was no change in terms of clinical and laboratory findings, but pituitary gland height was highly decreased (1 mm).

**DISCUSSION:** Cabergoline, used as a first-line agent for prolactinoma treatment, not only reduces the synthesis and release but also has cytolytic effects, thereby reducing tumoral mass. Consequently, macroprolactinoma patients treated with cabergoline should be followed-up more attentively and physicians should be alert in terms of therapy-related effects or complications.