17th European Congress of Endocrinology

Giant Prolactinoma - A Current Challenge!

Category: Pituitary Basic and Neuroendocrinology

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European Society of Endocrinology
the European hormone society

Introduction

Giant prolactinomas are rare tumors, representing 2–3% of all prolactin (PRL)-secreting tumors. Their definition is restricted to pituitary adenomas with a diameter ≥4cm or ≥2cm of suprasellar extension, very high PRL concentrations (≥1000 ng/mL) and no concomitant GH or ACTH secretion. They are more common in young to middle-aged men. Endocrine symptoms are often present for a long period of time, but most times the diagnosis is made when neurologic complications occur.

Purpose

We present a rare case of giant prolactinoma and review related literature.

Clinical case

The patient is a 40 years-old male, with no personal or family history of endocrinopathy. On July-2014 he rushed to the emergency department at CHAlgarve due to a change in behavior, confusion and loss of sphincter control occurring over the previous 2 days. The sellar-MR showed a mass with 68x46x50mm, involving intra and left parasellar with hydrocephalus and erosion of bone pavement. The patient underwent ventriculoperitoneal drainage and was admitted in the neurosurgery department.

July

Symptoms

Two years evolution:

- Progressive worsening headache, left lateralized, about 1/month;
- Diplopia;
- Right hemianopsia;
- Loss of nocturnal ejaculation;
- Reduction of facial hair;
- Decreased libido.

Laboratory study

Prolactin (3.46-19.40ng/mL)	> 2000
Free Testosterone (7.20-23pg/mL)	3,1
Cortisol (7-21microgr/dL)	8,6
FT4 (0.52 - 3.88 ng/dL)	0,91
GH (0,06-0,5 ng/mL)	0,95

Sellar-MR

Fig. 1 Sellar-MR: Mass with 68x46x50mm, intense contrast enhancement, involving intra and left parasellar with hydrocephalus and erosion of bone pavement.

- Cabergoline 0.5 mg/day, 2 pills/week
- Hydrocortisone 25mg/day

(started in the SU and slowly reduced)

August

- Rinorraquia

→ Endoscopic intervention to repair the sellar pavement.

September

- Loss of nocturnal ejaculation;
- Reduction of facial hair;
- Decreased libido.

Prolactin (3.46-19.40ng/mL)	117.56
Cortisol (7-21microgr/dL)	8,6
Free Testosterone (7.20-23pg/mL)	6,5
IGFBP3 (40-50 anos : 2- 4.3 mg/L)	3,0

December

- Asymptomatic without hydrocortisone

Prolactin (3.46-19.40ng/mL)	13,4
Total Testosterone (262 -1593 ng/dL)	273
Cortisol (0.52 - 3.88)	22,6

Fig. 2 Sellar-MR: Re-evaluation after 6 weeks therapy revealed a 29.4% tumor diameter reduction .

Conclusion

In patients with giant invasive pituitary adenoma it is important to evaluate pituitary function. Clinicians should be aware of hook effect. Although naïve or acquire resistance to dopaminergic agonists are most frequently in these tumors, medical therapy should be considered as first-line treatment in most patients.

17 ECE 680--EP

Pituitary basic and neuroendocrinology

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DOI: 10.3252/pso.eu.17ece.2015

Poster presented at: ECE2015 16-20 May 2015 DUBLIN, IRELAND 17th EUROPEAN CONGRESS OF ENDOCRINOLOGY

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