

# GROWTH HORMONE AND PROLACTIN SECRETING ADENOMA IN AN ADOLESCENT BOY

Fatma Dursun, Heves Kırmızıbekmez, Adnan Dağçınar<sup>2</sup>

S.B. İstanbul Ümraniye Training and Research Hospital, Pediatric Endocrinology, Istanbul, Turkey

<sup>2</sup>Department of Neurosurgery, Marmara University School of Medicine, Istanbul, Turkey.

## Introduction

Pituitary gigantism is a rare disorder. Pediatric endocrinologists may see at most one or two patients during their careers. In one large series of 2367 children and adolescents with pituitary adenomas, only 15 (0.6%) had pituitary gigantism. Much of our understanding is derived from isolated case reports and extrapolation from the adult literature. No sex predilection is known. Gigantism may occur at any age, and has been observed as early as the first six to nine months of age.

## Case

A 13-year and 6-month old boy was admitted for chronic headache. Magnetic resonance imaging (MRI) detected a pituitary adenoma which is 15x9 x7 mm in size. There was no history of a chronic disease, medication or familial malignancy. The height was 176.5 cm (+1.23 SDS), the weight was 53 kg (-0.04 SDS) and the blood pressure was 107/75 mmHg. Pubertal stage was Tanner stage-2. Laboratory findings were as follows: LH: 0.84mIU/mL, FSH: 1.73 mU/mL, total testosterone: 0.4 ng/dl, TSH: 2.3 mIU/L, free T4: 1.02 ng/dL, prolactin: 13.02 , cortisol: 10.5 mcg/dl, IGF-1: 656 (+2.6 SDS) ng/ml, growth hormone: 6.1 ng/ml, fasting blood glucose: 102 mg/ dl, insulin: 10.7 mU/mL. An oral glucose growth hormone suppression test was performed. Minimum growth hormone (GH) level was found as 3.6 ng/ ml which was not an adequate suppression. Ophthalmologic assessment was normal. This pituitary adenoma was primarily thought to be a GH. A transsphenoidal adenectomy was performed. Pathologic investigation revealed a GH and prolactin secreting adenoma. Clinical and laboratory findings recovered after surgery and still normal by the end of three months.

## Conclusion

This patient with GH and prolactin secreting adenoma was presented here, since it is a very rare condition in childhood. Despite the scarcity of disease, all patients with a pituitary adenoma deserve a comprehensive evaluation of pituitary functions.

