

A CASE OF ACROMEGALY PRESENTING WITH LACRIMAL GLAND HYPERTROPHY

Mehtap Cakir, MD¹

¹Kent Hospital, Division of Endocrinology, Izmir, Turkey

OBJECTIVES

Acromegaly is a chronic endocrine disorder caused by excess growth hormone (GH) secretion. Hypersecretion of GH causes increased IGF-1 secretion from the liver which in turn leads to a series of multisystemic complications including somatic overgrowth and multiple comorbidities. In this context, visceromegaly including exocrine gland involvement may be seen very rarely in acromegaly.

CASE REPORT

Thirty-nine-year-old female patient was seen in ophthalmology outpatient clinic with the complaint of a mass inside the right upper eyelid. On ophthalmologic examination a 10x10 mm mass (figure 1) was noted inside the lateral part of the right upper eyelid and an orbital magnetic resonance imaging (MRI) was planned with a preliminary diagnosis of lacrimal gland cyst/tumor. MRI revealed an enlarged right lacrimal gland with homogenous signal intensity which was compatible with lacrimal gland hypertrophy. Additionally, a 16x8x10 mm pituitary mass expanding the sella, extending into the right cavernous sinus and deviating infundibulum to the left (figure 2,3,4). The patient was referred to the endocrinology outpatient clinic.

RESULTS

On medical history, her periods had stopped one month ago. When questioned she mentioned that she was snoring during sleep and her shoe size had increased. On physical examination, she had prognathism, a prominent forehead, deep nasolabial folds and a conjunctival mass inside right upper eyelid was noted. She had bulky hands. On laboratory evaluation, her IGF-1 level was 275 (normal range: 66-240) ng/ml. On 75 gram oral glucose load, fasting and 2-hour plasma glucose levels were within normal limits, while baseline, 30. minutes, 60. minutes, 90. minutes and 2-hour serum GH levels were; 1.98, 1.79, 1.3, 1.23 and 1.05 ng/mL, respectively. With a diagnosis of acromegaly the patient had pituitary adenectomy and immunohistochemical analysis of the pathology specimen was compatible with GH-secreting pituitary adenoma.

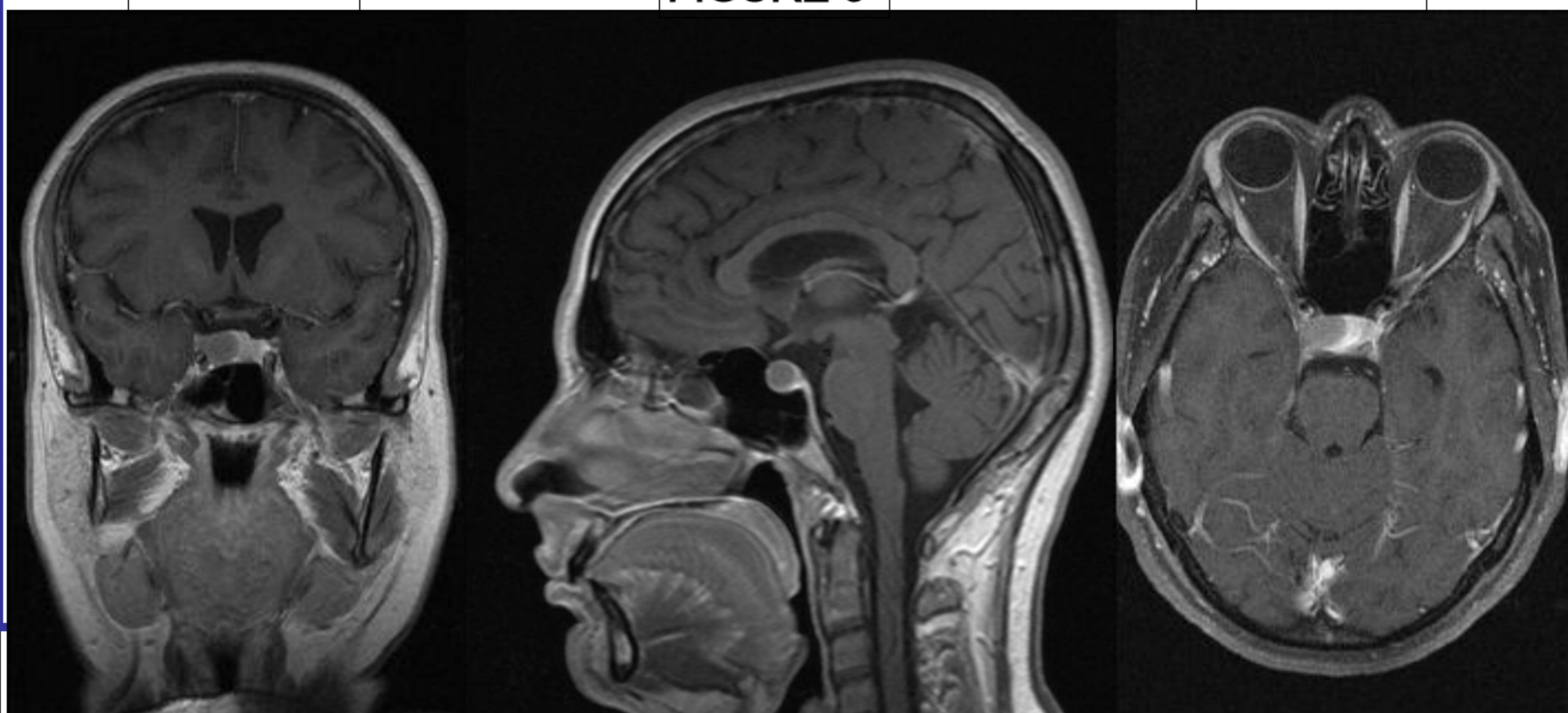


FIGURE 1

FIGURE 2

FIGURE 3

FIGURE 4



CONCLUSIONS

Hypersecretion of GH may cause somatic overgrowth and these patients may present with several different clinical or metabolic features. Exocrine gland involvement has been described in acromegaly, albeit rarely (1,2). Regarding lacrimal gland involvement in acromegaly there is only one report from India about two cases presenting with epiphora and proptosis. In one of these cases lacrimal gland enlargement was noted on physical examination and cranial MRI revealed bilateral enlarged lacrimal glands. Lacrimal gland hypertrophy may be a component of visceromegaly which is a clinical feature of acromegaly.

References

1. Manetti L, Bogazzi F, Brogioni S, Grasso L, Lupi I, Genovesi M, Cecconi E, Gasperi M, Martino E. Submandibular salivary gland volume is increased in patients with acromegaly. Clin Endocrinol 2002;57(1):97-100.
2. Mehra M, Mojsin M, Sharma P, Dewan T, Taneja A, Kulshreshtha B. Epiphora and proptosis as a presenting complaint in acromegaly: Report of two cases with review of literature. Indian j Endocrinol Metab 2013;17(Suppl 1):S149-51.

