The Intercontinental Journal of
Internal Medicine

DOI: 10.51271/ICJIM-0006

Case Report

Late diagnosed prolactinoma in men: a case report

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Cite this article: Karabulut U, Solmaz İ, Özçaylak S, et al. Late diagnosed prolactinoma in men: a case report. *Intercont J Int Med* 2023; 1(1): 30-31.

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Submit Date: 01/02/2023 **Accept Date:** 22/02/2023

ABSTRACT

Endocrinologic examinations encounter hyperprolactinemia, which is the release of prolactin hormone in excess of normal amounts, more frequently than any other pathological condition. In this case, we present a case of ıt is explained that a 42-year-old male patient can be diagnosed with prolactinoma by deepening the anamnesis without specifics symptoms. It is aimed to raise awareness on this issue.

Keywords: Hyperprolactinemia, macroadenoma, male sex

INTRODUCTION

Endocrinologic examinations encounter hyperprolactinemia, which is the release of prolactin hormone in excess of normal amounts, more frequently than any other pathological condition.[1] Prolactinomas are the most prevalent type of pituitary adenoma associated with the hypersecretion of hormones. Women should have prolactin levels of less than 25 ng/mL, while men should have levels of less than 20 ng/mL.[2] Prolactinomas are typically categorized as macroprolactinomas (less than 1 cm) or macroprolactinoma (greater than 1 cm) (greater than 1 cm).[3] Although prolactinomas are almost always benign, they frequently necessitate treatment due to gonadal dysfunction caused by prolactin hypersecretion or tissue compression caused by mass effect.[4] In this case report, we present an unusually early diagnosis of prolactinoma in men.

CASE REPORT

A 42-year-old man with no comorbidities and no history of substance abuse was referred to the ophthalmology outpatient clinic with complaints of blurred vision in the right eye for approximately one year, which resolved spontaneously 1-2 times per month, and headache for the past three months. The patient was referred to the neurology outpatient clinic following an ophthalmologic examination that revealed no pathology. In his anamnesis, he described localized pain in the anterior portion of the head for three months, which did not resolve with pain medication and rest, and he had complained of impotence for the past year. Non-contrast cranial magnetic resonance imaging (mrg) and testosterone hormone level for the complaint of impotence were studied. He was referred to the endocrinology outpatient clinic due to the presence of a pituitary mass in non-contrast cranial mrg and a testosterone value of 0.061 ng/mL. On physical examination, fever: 36.8°C, pulse: 80/min, blood pressure: 110/70 mmHg, saturation: 96%, respiratory rate: 13/min; decrease in the frequency of hair in the pubic and chest area and thinning of the existing hair (**Figure 1**). Other system examinations were normal. Anterior pituitary hormone levels were studied, and contrast-enhanced pituitary mrg was taken. Prolactin: >4700 µg/L (4.04-15.2), Testosterone: 0.061 ng/mL (2.49-9.36), TSH: 1.08 mU/L (0.27-4.2), Free T4: 0.59 ng/dl (0.93-1.70), Free T3: 1.91 pg/ml (2.0-4.4), FSH: 1.47 U/L (0.95-11.95), LH: 1.13 U/L (0.57-12.07), ACTH: 41.7 pg/mL (7.2-63.3), Cortisol: 2.29 µg/dL (6.2 - 19.4). The patient's pituitary hormone response was not at the expected level, and contrast-enhanced pituitary mrg: "At the level of coronal images in the sellar region, a mass lesion measuring ML 33 mm, CC 22 mm, AP 27 mm with a smooth lobule contour with hemorrhagic areas, significantly enlarged the sellar region, and slightly compressed and arched the adjacent vascular structures was observed. The patient was diagnosed as a prolactin hypersecreting macroadenoma based on the postcontrast series report "(**Figures 2** and **3**). Treatment was started with methylprednisolone 40 mg (milligram), levothyroxine 50 mcg (microgram), and cabergoline 0.5 mg 2 times a week. The patient was referred to neurosurgery for a surgical procedure because of hemorrhage foci in the macroadenoma.

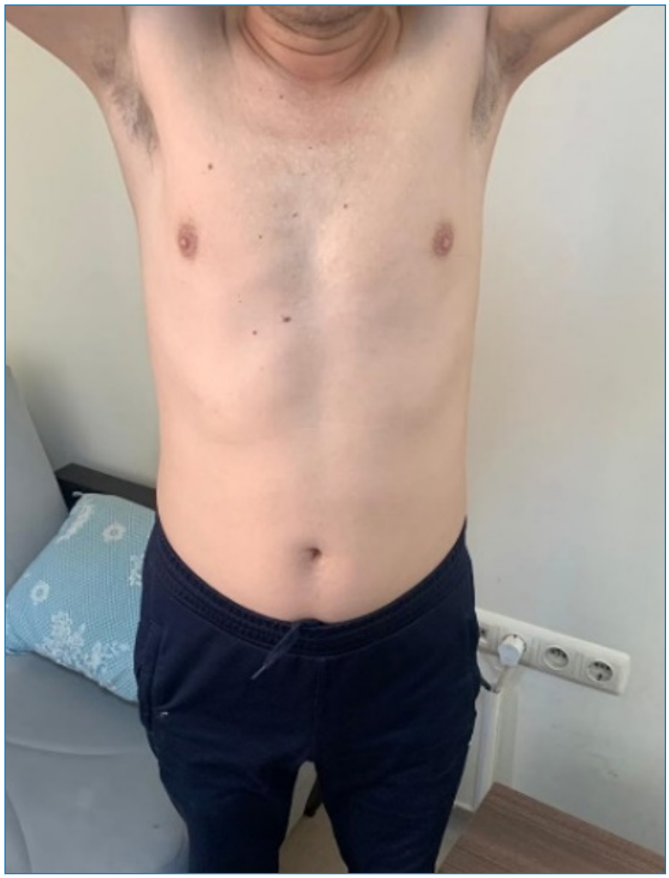

Figure 1. Reduction in the patient's body hair

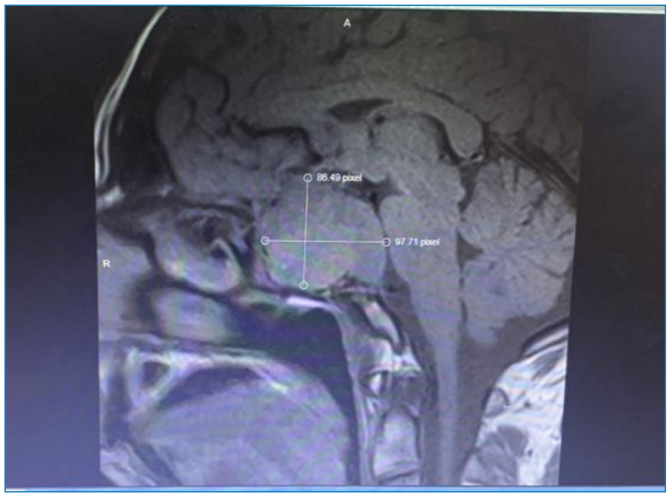

Figure 2. MRI image of the patient's pituitary adenoma

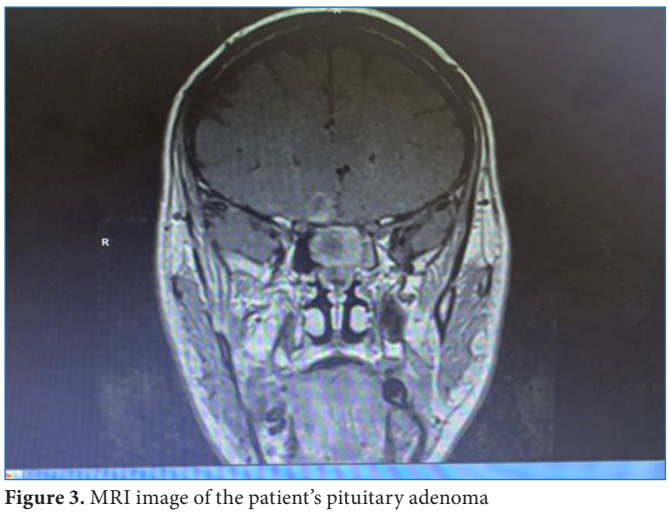

Figure 3. MRI image of the patient's pituitary adenoma

DISCUSSION

Although prolactinomas are the most common type of hormone-secreting pituitary adenoma, the onset of clinical symptoms in men may be delayed, or the diagnosis may be missed due to the absence of specific symptoms, as was the case in our patient.[5] The purpose of treatment is to normalize prolactin levels, ensure fertilization, correct gonad functions, reduce tumor size, treat visual field loss and cranial nerve palsies, if present, and, if possible, reverse pituitary dysfunctions.[6] Since prolactinomas do not present with specific symptoms, particularly in male patients as in our case, we wanted to raise awareness of this issue by emphasizing that the diagnosis can be made by obtaining a more in-depth medical history.

ETHICAL DECLARATIONS

Informed Consent: All patients signed the free and informed consent form.

Referee Evaluation Process: Externally peer-reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

Author Contributions: All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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