

Prolactinoma masquerading as Peri-Orbital Cellulitis: A Unique Presentation

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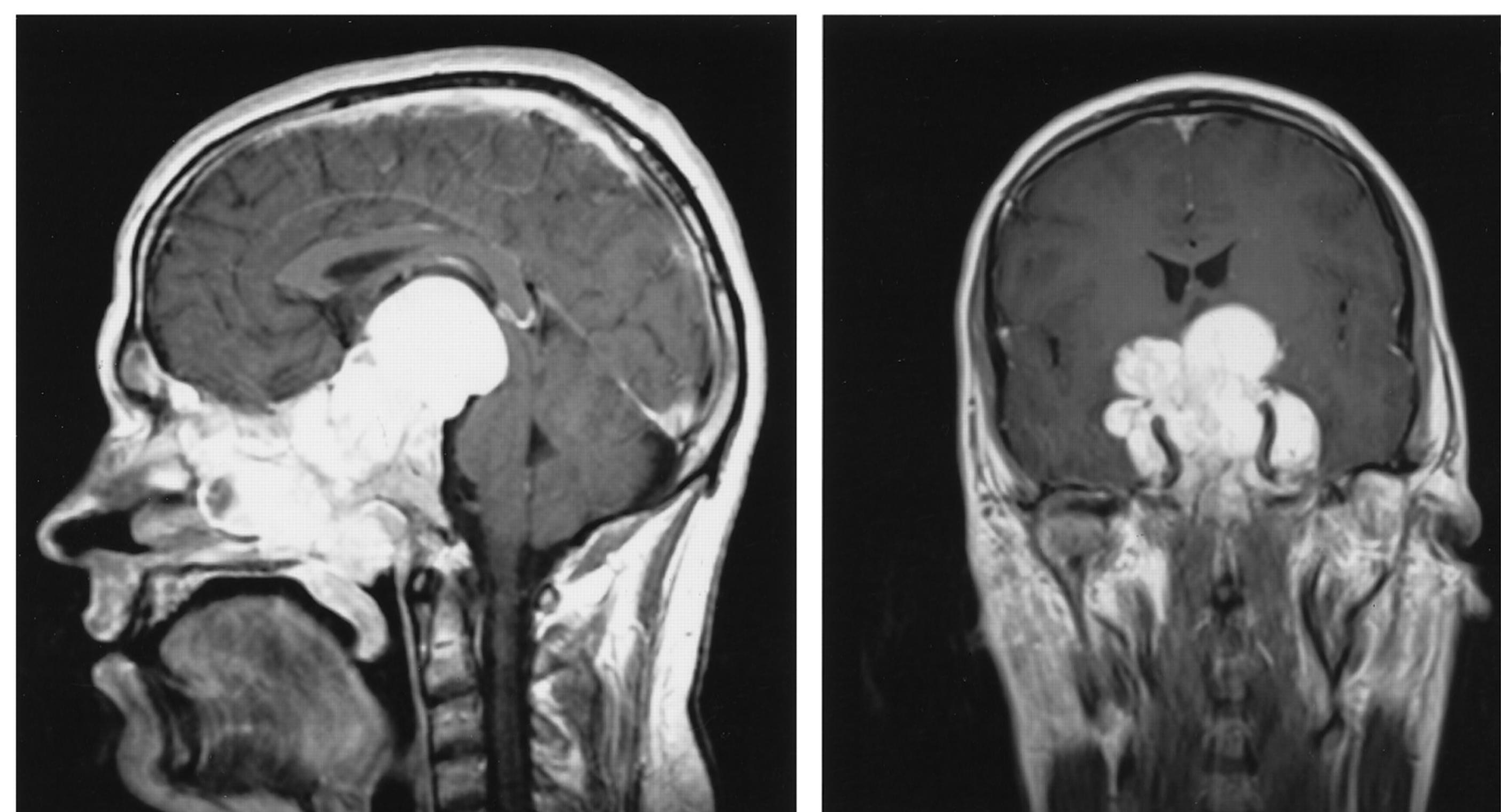
Introduction

- Prolactinomas in men present most commonly with headaches, visual disturbances, decreased libido and erectile dysfunction.
- We describe an unusual case of prolactinoma in a 20-year-old male who presented with left periorbital swelling with isolated left third cranial nerve palsy.

Fig 1. Left periorbital swelling



Fig 2. Large macroadenoma



Case Description

- A 20 y/o M presenting with increasing left periorbital swelling and pain, isolated left sided ptosis, left facial swelling and intermittent left sided headaches with aura for 10 days.
- Afebrile, tachycardiac and moderately hypertensive.
- His blood work revealed a WBC count of 19.4 B/L (normal 4.0-11.0 B/L).
- Started on broad spectrum intravenous antibiotics.
- Emergency CT Angiogram of the head and orbits showed a large Sellar mass extending superiorly and to the left, deviating the supraclinoid left internal carotid artery laterally.
- A follow up MRI of the head and pituitary showed similar findings and delineated a 3.4 x 2.7 cm Sellar mass involving the left cavernous sinus.
- This was diagnosed to be a pituitary macroadenoma.
- Serum prolactin levels were 4700 ng/ml (normal 0-19 ng/ml).
- Endocrinology was consulted and patient was started on cabergoline therapy with good response.
- He was discharged on day 4 from the hospital.
- He currently remains on treatment with gradually decreasing prolactin levels and resolution of symptoms.

Discussion

- Prolactinomas are benign tumors of the pituitary gland
- Less than a fifth of cases occur in men and macroadenomas are more common.
- Large prolactinomas can be in close proximity with the cavernous sinus that contains cranial nerves, sympathetic plexus and carotid artery.
- The pressure effect of prolactinomas on the cavernous sinus explains cranial nerve palsies, as seen in our case.
- Recent research has shown a bidirectional communication between the immune and neuroendocrine system with prolactin having a proinflammatory effect by reducing the apoptosis of B cell lymphocytes and increasing their auto reactivity that further results in inflammation that can result in facial swelling.

Conclusion

While Sexual dysfunction, vision abnormalities and headaches remain the most common presentation of prolactinomas, our patient presented with isolated unilateral periorbital swelling which made the diagnosis initially challenging.

References

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