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Letter to the editor

An atypical pituitary incidentaloma

In early 2016, a 73-year-old man was referred to our endocrinology unit for suspicion of a pituitary adenoma. His medical history included bladder cancer in 2007 treated with cystoprostatectomy and enterocystoplasty, kidney cancer diagnosed in 2013 and treated by partial nephrectomy. He also had a stroke in 2008 and was on continuous antiplatelet therapy.

Since June 2015, he complained of morning headaches without any clinical signs. A brain MRI (Fig. 1) was performed and showed a contrast-enhanced suprasellar mass measuring 19 × 17 × 16 mm. His headaches were controlled by paracetamol treatment.

No clinical signs of hypersecretion, pituitary insufficiency or diabetes insipidus were present. Pituitary hormone function tests – cortisol, prolactine, testosterone, thyroxine and plasma TSH – were normal. Visual testing (visual field, OCT and visual acuity) was also normal. Since a metastasis of the previous cancers had to be ruled out and a precise diagnosis was mandatory, we decided to carry out a ventriculostomic biopsy.

The biopsied tissue contained spindle-shaped cells with granular eosinophilic cytoplasm. No mitosis was present. Cells expressed only TTF1 and PS100. No cells expressed Ki67. The histopathology pointed to a rare benign tumor: a pituicytoma.

We decided to simply monitor the patient, given the absence of visual impairment and because of his age. No worsening was detected at the 3-month evaluation and the next assessment is scheduled at 1 year.

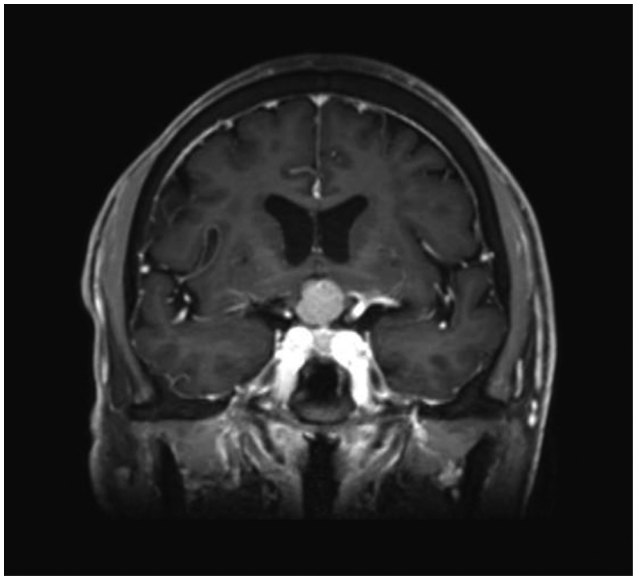

Fig. 1. Coronal view of sellar MRI (T1-weighted sequences) showing a contrast-enhanced suprasellar mass.

Pituicytomas are rare primary tumors originating from the pituicytes in the neurohypophysis and pituitary stalk [1]. The first case of this type of glioma was identified in the posterior lobe of the pituitary gland and described by Scothorne in 1955. Less than 80 cases of pituicytoma have been reported in the literature [2].

Also called choristoma or granular cell tumor, they are very slow growing benign tumors, recognized as a full entity since 2007 [3]. The diagnosis is based on anatomical pathology; pituicytomas have positive immunofluorescence staining for S-100 and vimentin protein, and negative or low to moderately positive staining for GFAP [1]. The sole treatment is surgery [4]. These tumors in the pituitary region may resemble other tumors, such as an adenoma, a meningioma or a craniopharyngioma [5].

Disclosure of interest

The authors declare that they have no competing interest.

References

[1] Brat DJ, Scheithauer BW, Staugaitis SM, Holtzman RN, Morgello S, Burger PC. Pituicytoma: a distinctive low-grade glioma of the neurohypophysis. Am J Surg Pathol 2000;24(3):362–8.
[2] Yang X, Liu X, Li W, Chen D. Pituicytoma: a report of three cases and literature review. Oncol Lett 2016;12(5):3417–22.
[3] Brat DJ, Scheithauer BW, Fuller GN, Tihan T. Newly codified glial neoplasms of the 2007 WHO Classification of Tumours of the Central Nervous System: angiocentric glioma, pilomyxoid astrocytoma and pituicytoma. Brain Pathol 2007;17(3):319–24.
[4] Feng M, Carmichael JD, Bonert V, Bannykh S, Mamelak AN. Surgical management of pituicytomas: case series and comprehensive literature review. Pituitary 2014;17(5):399–413.
[5] Shah B, Lipper MH, Laws ER, Lopes MB, Spellman MJ. Posterior pituitary astrocytoma: a rare tumor of the neurohypophysis: a case report. AJNR Am J Neuroradiol 2005;26(7):1858–61.

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