

Endoscopic Total Remove of Sellar and Suprasellar Papilloma Tumor: A Rare Case Report and Review of the Literature

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Abstract: Papillary tumor of the pineal parenchyma (PTPP) is a rare entity of pineal region [1]. We report a first case of a PTPP developed in the sellar and suprasellar region. It is about Ms. CGL, 52 years old, who presented a headache with visual disorders. Clinical examination reveals a bitemporal hemianopia without other signs. Imaging has highlighted a sellar and suprasellar lesion compressing the optic chiasma. The hormonal assessment showed a discreet hypothyroidism. The patient underwent complete excision by endoscopic endonasal approach with good visual decompression. The postoperative evolution was favorable. MRI control confirmed total resection of the lesion. Histological exam reveals a papillary tumor of pineal region. This histological type has never been reported in the literature at the sellar region; however, adenomas may in rare cases present papillary architecture [2].

Keywords: Papillary tumor, parenchyma, sellar, suprasellar, bitemporal.

INTRODUCTION

PTPP is a rare entity that has been recently described [1,3]. Only few cases are described in the literature [3]. We report in this observation a case of PTPP developed at the sellar and supra sellar region.

CASE REPORT

It is about a 52 years old female patient with arterial hypertension on treatment for 2 years who presented amenorrhea without galactorrhea a year before her admission at the neurosurgery department complicated by a decrease in visual acuity with chronic headache for 2 months.

Clinical examination found a bitemporal hemianopia without other associated signs (figure 1).

Hypophysiogram shows a corticotropic and thyrotropic deficiency that have been substituted with mild hyperprolactinemia.

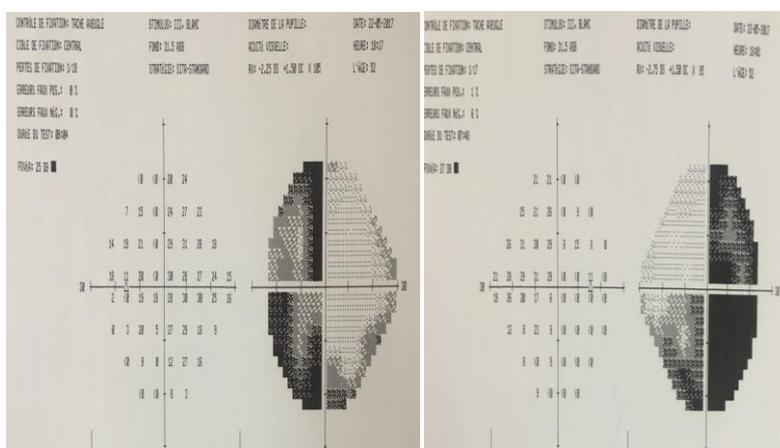


Fig-1: the visual field of the two eyes shows bitemporal hemianopia

The MRI shows a sellar and suprasellar heterogeneous lesion compressing the optic chiasma (figure 2).

Surgical management consisted on a total endoscopic excision of the lesion by an endonasal

transphenoidal approach using initially 0 degree optic than the 30 degrees optic for the suprasellar portion. At the end a reconstruction of the floor is done by abdominal fat.



Fig-2: injected T1 MRI, coronal section, showing a sellar lesion with supra-sellar extension compressing the optic chiasma measuring 31*25 mm

Post-operative follow shows a good clinical and radiological evolution, with a total removal of the

lesion in the 2 months post-operative MRI control (figure 3).

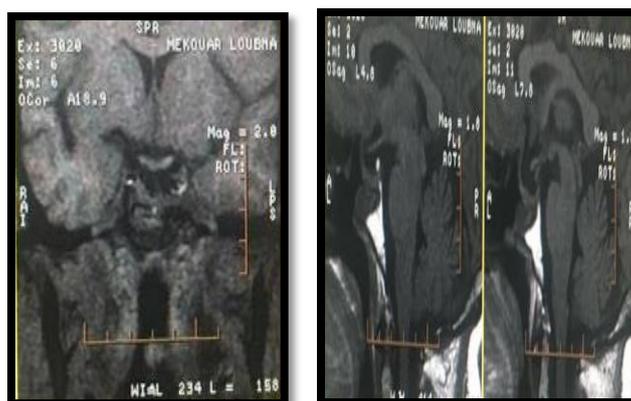


Fig-3: 2 months postoperative MRI, T1 sequence, coronal and sagittal section showing complete excision of the lesion

The histological exam showed that it's a tumor with papillary architecture proliferation. The KI 67% is less than 5%. The immunohistological exam found that it's a tumor that strongly expresses chromogranin A and cytokin 18 wich lead to the conclusion of papillary tumor of the pineal parenchyma.

The histological exam was done by more than 3 neuropathologists at referral centers in Morocco than send to pitie salpetriere pathologist center wich confirm the diagnosis.

DISCUSSION

In Our review of the literature, we found that papillary tumor of pineal region is a very rare entity [1]. The autors of 2007 world health organisation classification of tumors of the central nervous system

described for the first time two recent distinct entity of intracranial tumor: papillary tumor of the pineal region and spinale celle astrocytoma of the pituitary gland [3]. In the literature, there is only 41 examples that have been documented [3].

However communication with neuropathologists at referral centers across the world show that PTPR have previously been reported under various names, including papillary pineacytoma, pineal parenchymal tumor, choroid plexus tumor, ependymoma and papillary meningioma[3].

The literature review shows that the PTPR does not arise from the pineal gland itself, the cell of origin is thought to be the specialized ependymocytes of the subcommissural organ [4].

It's a structure of the circumventricular organs that are series of midline structures located around the ventricular system and open to neuro-hemal exchanges [5].

The circumventricular organs are: organum vasculosum of laminae terminalis, subfornical organ, post pituitary or median eminence, subcommissural organ, pineal gland and area postrema [5-6]. Circumventricular organs have common morphological and endocrine-like characteristics [7].

CONCLUSION

In the base of what we discuss we can suggest a new entity that can be called papillary tumor of circumventricular tumor including PTPR. Our case will be the first one to be described in the literature.

Contributions of the authors

All the authors contributed to the medical care of the patient, as well as the writing this article they approved.

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