



METASTASIS OF MELANOMA INTO A PITUITARY ADENOMA



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INTRODUCTION

Metastasis found in a normal pituitary gland are rare (1%) and the most frequent are of breast or lung carcinomas. Metastization to a known pituitary tumour is even rarer and only 18 cases are described in the literature. Metastasis of a melanoma into a pituitary tumour are extremely rare and we found only one case reported in the literature.

CASE REPORT

We describe the case of a male patient of 67 years-old, followed in our Pituitary Group outpatient clinic since 1995, when a macroadenoma was diagnosed during the investigation of visual amputation. He also had hypopituitarism and began levothyroxine, hydrocortisone and testosterone replacement therapy. At that time he was submitted to craniotomy followed by adjuvant radiotherapy.

His clinical state had been stable for 15 years when, in 2010, a dorsal nodular melanoma Clark's level IV was excised.

In December 2013 he entered the emergency room after a sudden onset of headache, vomiting and decreased visual acuity in the left eye. Brain magnetic resonance imaging (MRI) suggested pituitary apoplexy (Figure 1 and 2) and he underwent partial removal of the lesion by transphenoidal surgery. After the surgery, the patient presented a clinical improvement and we haven't performed early MRI.

The histological result revealed a melanoma metastasis within pituitary adenoma (Figure 3-9).

2 months later he presented with nausea and vomiting and MRI revealed the sellar/suprasellar lesion with similar dimensions and a left fronto opercular lesion de novo (Figure 10-11). The patient died 3 months later.

CONCLUSIONS

Imagiology and macroscopy findings during surgery suggested that this patient had a pituitary apoplexy of a residual tumor but histology revealed that it was a melanoma metastasis within the residual adenoma. The similarity of the image and macroscopy in both situations confounded the surgeons decision.

In spite of being rare, this case alerts to possibility of a metastasis into an adenoma when there is the coexistence of another tumour highly prone to metastisation.

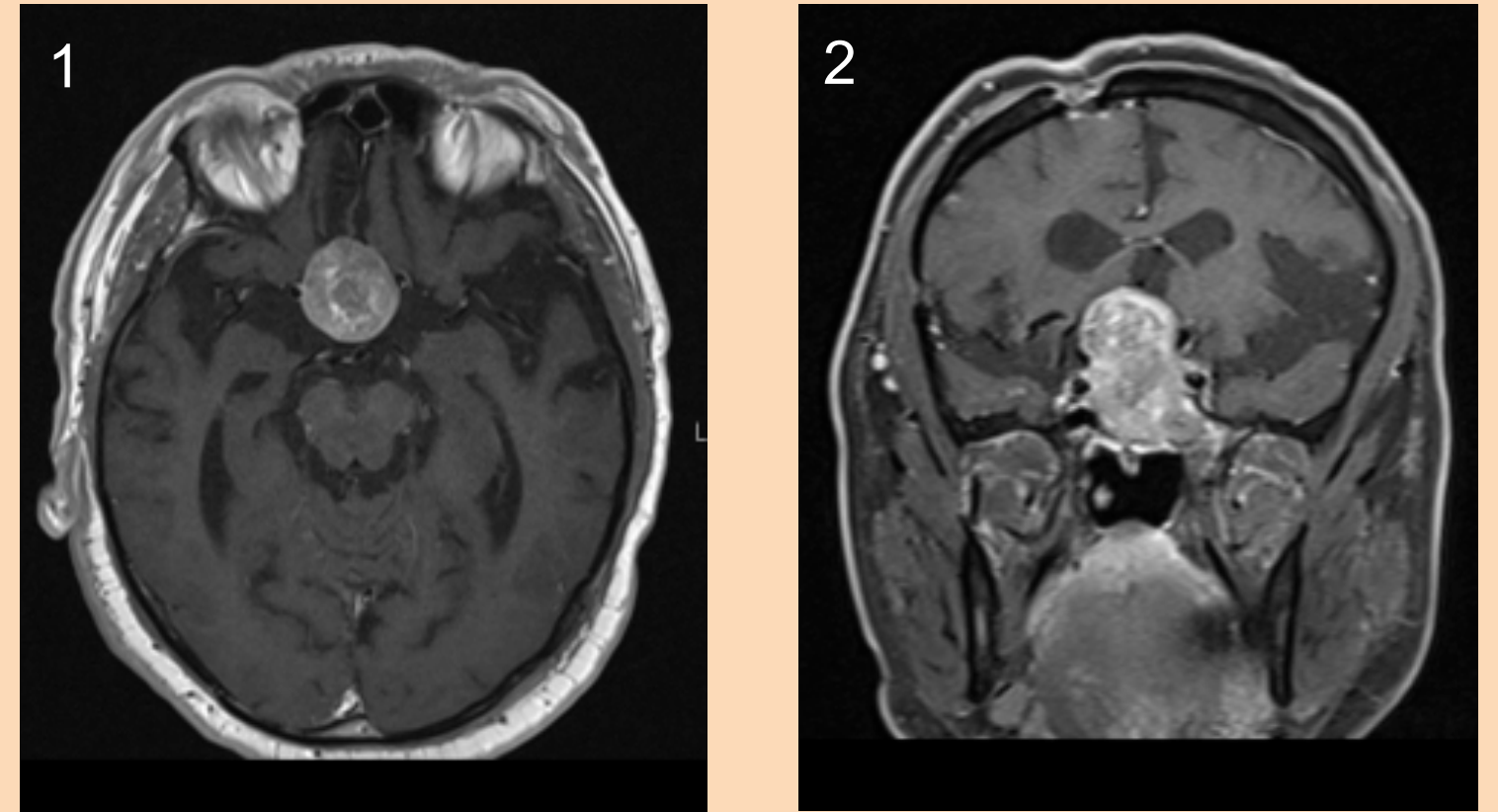


Figure 1 and 2: Brain MRI in December 2013. Gadolinium-enhanced T1-weighted images showing a sellar/suprasellar lesion with 26x42mm, heterogeneous signal and invasion of the sphenoid sinus.

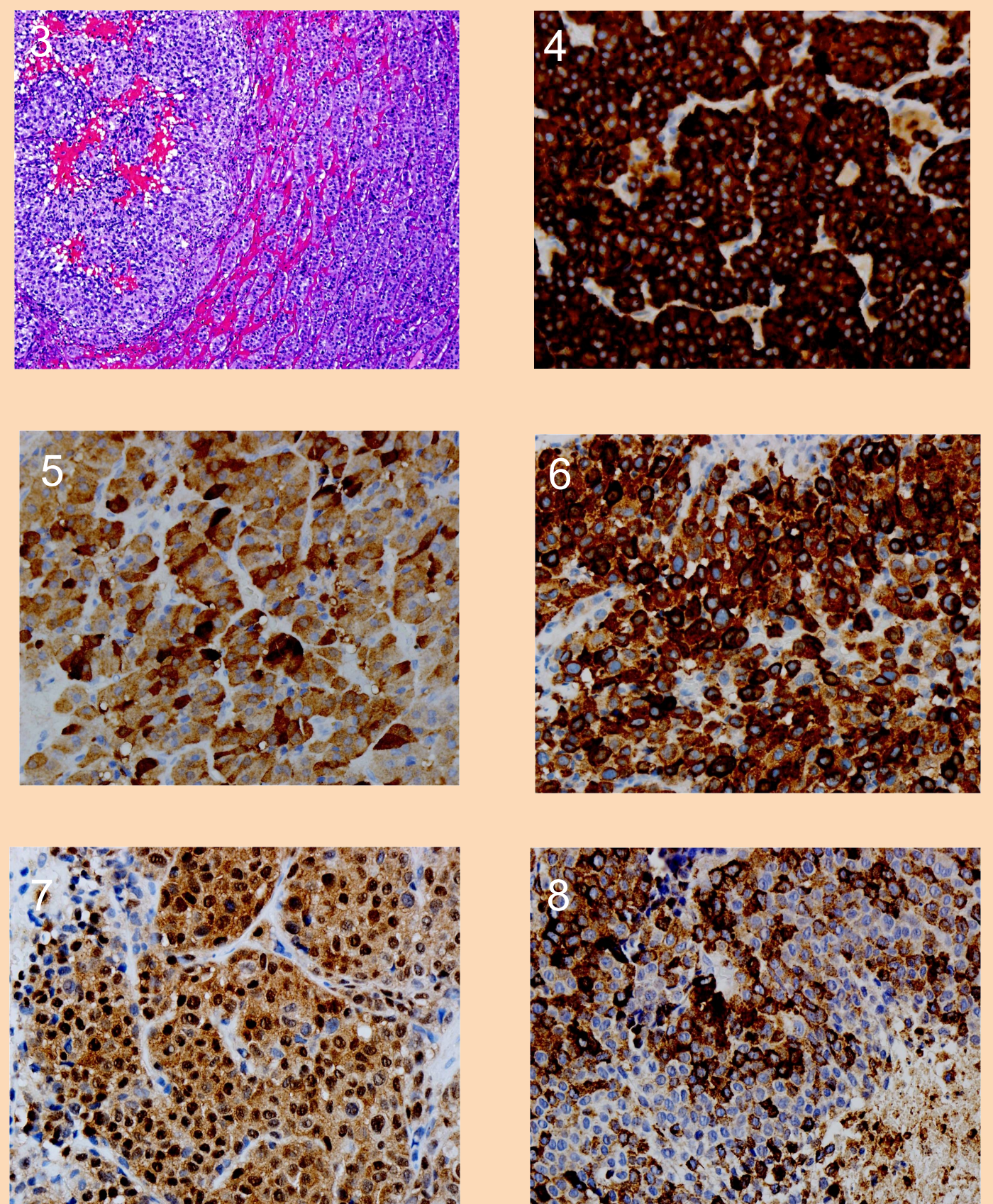


Figure 3-8: Histologic tissue sections. (3) Hematoxylin and eosin, 100× original magnification showing melanoma cells at the left and adenoma cells at the right. Synaptophysin (4) and FSH (5) positive staining in the adenoma cells. Melan A (6), Mitf (7) and HMB45 (8) positive staining in the melanoma cells.

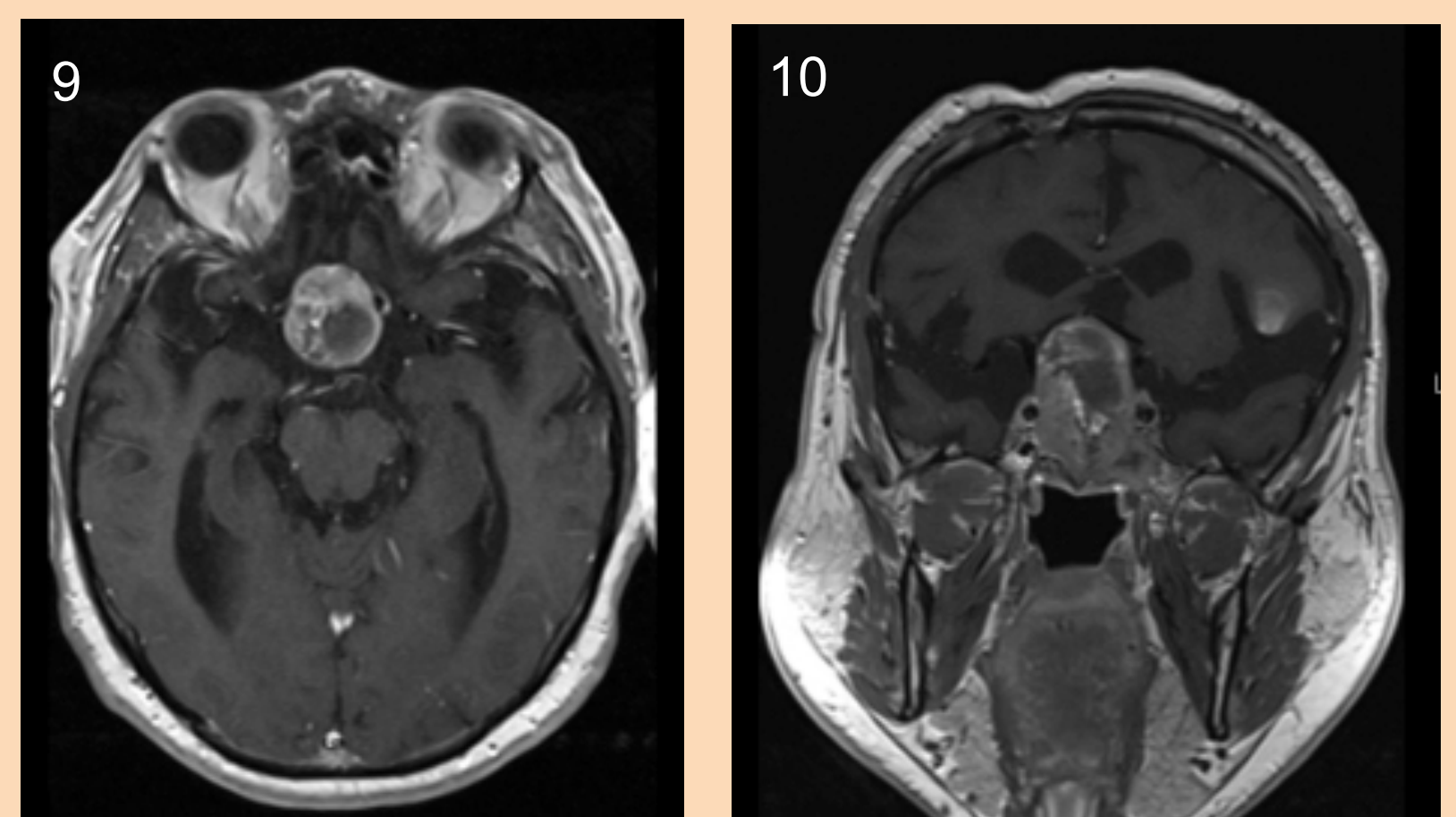


Figure 9-11: Brain MRI 2 months after the transphenoidal surgery. Gadolinium-enhanced T1-weighted images showing regrowth of the sellar/suprasellar lesion and a new left fronto-opercular lesion.