Teaching NeuroImage: Spindle cell oncocytoma of the pituitary gland

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Figure 1 MRI T1-weighted image with gadolinium showing a solid mass within the pituitary fossa (arrow)

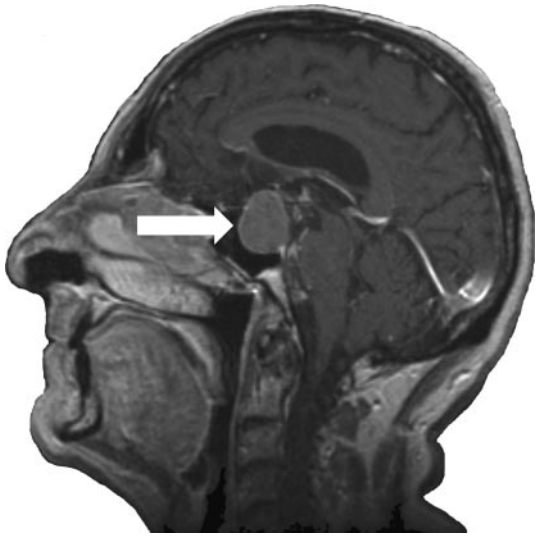
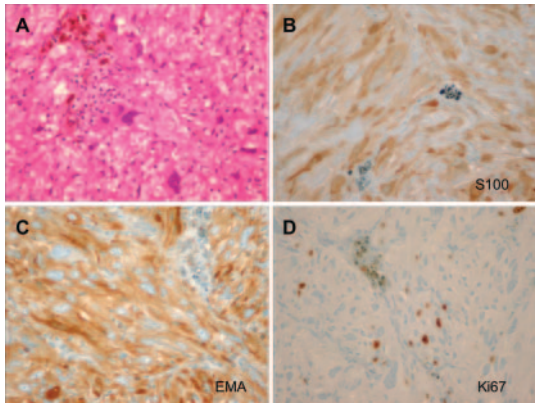


Figure 2 Histopathologic images revealing interwoven fascicles of eosinophilic spindled cells with features



The tumor consists of eosinophilic spindle cells, some with marked nuclear atypia. Focal hemosiderin deposits are seen in the background (A). The tumor cells are immunoreactive for S-100 (B) and EMA (C). The Ki67 labeling fraction is relatively low (D).

A 76-year-old man had worsening generalized weakness and headache for several months. MRI showed a solid enhancing sellar mass suggestive of a pituitary macroadenoma (figure 1). Differential diagnoses included pituicytoma, paraganglioma, meningioma, and solitary fibrous tumor. Due to intraoperative bleeding, this tumor was only partially resected. Histopathology revealed interwoven fascicles of eosinophilic spindled cells with features (figure 2, A through D) consistent with pituitary spindle cell oncocytoma, a rare benign tumor with clinical and radiologic presentations indistinguishable from the non-hormone producing macroadenomas.[1,2] This patient received radiation therapy postoperatively and showed no change in tumor size during the 2 years after surgery.

REFERENCES

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