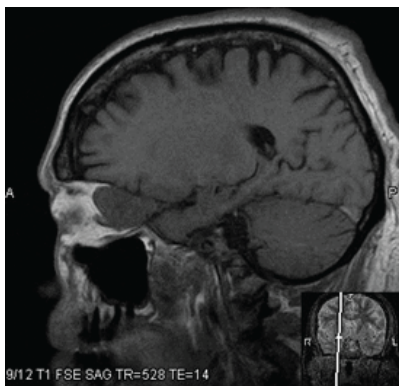




A



B

Figure 1. T1 axial (A) and sagittal (B) MRI demonstrates a well demarcated near iso-intense (relative to muscle) extraconal mass in the posterior and superior right orbit.

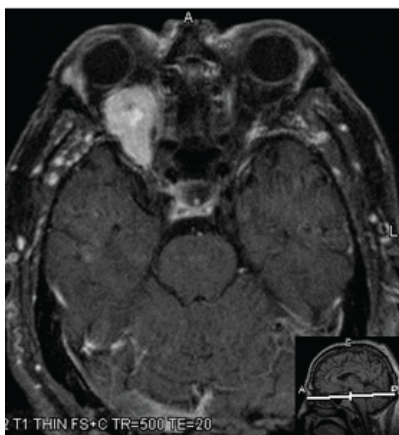


Figure 2. T1 fat-suppressed post gadolinium axial MRI demonstrates robust, near-uniform enhancement of the orbital mass.

Case Report

68 year-old male presents with a several month history of progressive double vision, followed by abrupt right-sided ophthalmoplegia and vision loss. MRI demonstrated a smooth, well-defined post septal, extraconal mass in the right orbit superior and posterior to the globe and extra-ocular muscles. T1 axial post gadolinium imaging demonstrated robust uniform enhancement (Figures 1 and 2). Final biopsy-proven diagnosis was solitary fibrous tumor (SFT) of the orbit.

Imaging Features of Solitary Fibrous Orbital Tumors

SFT of the orbit has been reported to be intraconal or extraconal.^{1,2} It generally has well demarcated margins and the following characteristics on MRI:

- T1 : iso-intense relative to muscle
- T2 : iso- to hypo-intense relative to muscle
- T1 C⁺ : homogeneous enhancement

Discussion

Solitary fibrous tumor is a rare spindle-cell neoplasm originating from mesenchymal fibroblast-like cells. Although most occur in the parietal or visceral pleura or peritoneum, they can arise from other extrapleural sites, including the mediastinum, lung, liver, breast, retroperitoneum, spine, meninges, and extracranial head and neck region such as the orbit, sinonasal cavity, salivary gland, thyroid gland, upper aerodigestive tract, infratemporal fossa, buccal space, and parapharyngeal space. Due to better diagnostic tools such as the widespread use of immunohistochemical studies, the reported incidence of orbital SFT's has increased since the first orbital SFT was reported in 1994.⁵ The differential diagnosis for a highly vascular orbital lesion includes capillary hemangioma, cavernous hemangioma (venous malformation), varix, hemangiopericytoma, and giant cell angiofibroma. Cavernous hemangiomas are the most common vascular lesions of the orbit in adults.²

References

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