

# Cavernous Sinus Ewing's Sarcoma

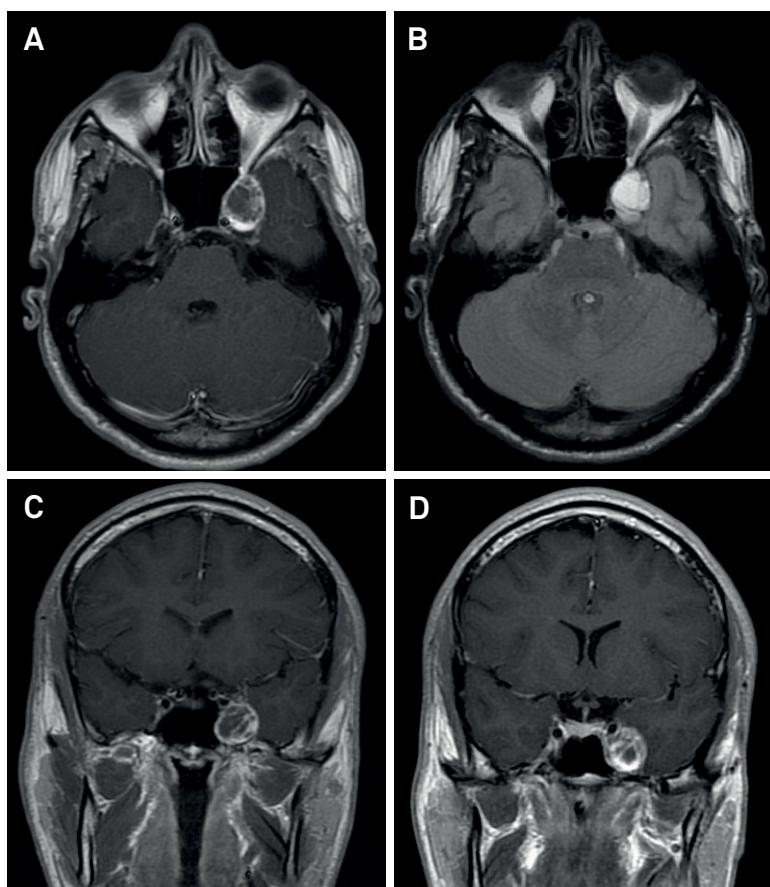
## Sarcoma de Ewing do Seio Cavernoso

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Ewing's sarcomas (ES) are malignant tumors mostly found in children and young adults<sup>1,2,3</sup>. There are only six cavernous sinus ES reported in the literature<sup>1,2,3,4,5</sup>.

A 21-year-old male presented with diplopia and left VI nerve palsy. Imaging revealed a lesion in the left cavernous sinus (Figure 1). A pretemporal craniotomy was performed with partial resection and recovery.

The tumor consisted of small round cells on histopathological examination (Figure 2), positive for CD99, CD56, BCL-2 and Ki 67 positive in 10% of the cells and were negative for desmin, synaptophysin, GFAP, S-100 protein, CLA, cytokeratin 7 and 20, 34BE12, AE1/AE3, consistent with Ewing's sarcoma.



**Figure 1.** A. post-contrast T1 MRI showing a peripheral contrast enhancing ovoid lesion measuring 2.1 x 1.6 x 1.6 cm in the left cavernous sinus. The center of the lesion is heterogeneously enhanced with hypointense areas that may denote necrosis. B. FLAIR sequence MRI showing a hyperintense lesion. C. and D. post-contrast coronal T1 MRI showing the tumoral relationship to the carotid artery, sphenoid sinus and middle cranial fossa. Differential diagnosis includes meningioma, lymphoma, pituitary tumor, carcinoma, neuroblastoma, rhabdomyosarcoma, small round cell sarcoma and hemangioma

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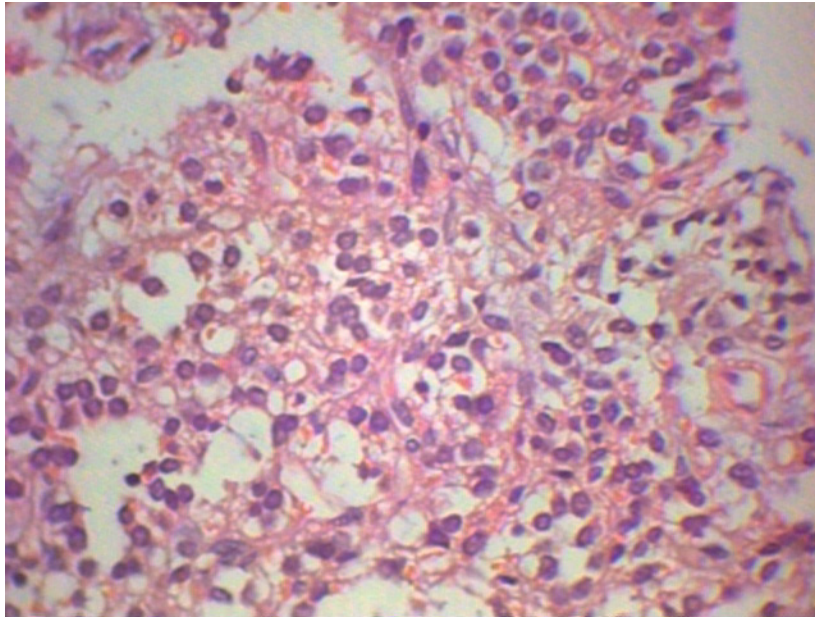
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**Figure 2.** Hematoxylin-eosin magnification x 40 showing an undifferentiated neoplasm, consisting of almost all small cells with oval or rounded nuclei, and scarce cytoplasm with indefinite limits. The cells are compactly arranged, without forming rosette structures.

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