Hemangiopericytoma

Jennifer Tinker

Department of Neurology, Thomas Jefferson University, Philadelphia, PA, USA

Definition

A hemangiopericytoma (HPC) is a highly vascularized soft tissue neoplasm arising from pericytes (connective tissue cells) encapsulating capillaries and postcapillary venules. CNS hemangiopericytomas are almost exclusively found to occur within the epidural space of the brain and spinal cord, without infiltrating the surrounding CNS parenchyma. Approximately 70% are supratentorial, with 15% in the posterior fossa and 15% in the spinal cord. Intraventricular lesions have also been reported (Al-Brahim et al. 2004). Duration of symptoms at presentation is typically less than 1 year due to rapid growth. Most common presenting complaint is headache, focal neurological deficit, and/or seizure. Hemangiopericytomas are particularly aggressive tumors that have high rates of metastasis and a tendency to recur, even following gross total resection, which is the principal treatment strategy (32–67% of published cases). Although these tumors are extra-axial, they can cause limited cognitive impairment, but the mechanism is not clear. These tumors occur primarily in adults (median age 45 years), with fewer than 10% of

reported occurrences in children (Ecker et al. 2003). Survival rates appear to be greater when patients receive adjuvant radiotherapy (Rutkowski et al. 2012). Chemotherapy may be indicated in recurrent disease, and novel anti-angiogenic therapies are being evaluated for extracranial hemangiopericytomas (Park and Araujo 2009). Cognitive impairments can be associated with these tumor treatments.

Cross-References

► [Meningioma](#)

References and Readings

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