Intraventricular Hemangiopericytoma: A Case Report and Literature Review

James Towner, MD, Neurosurgery Resident

BACKGROUND:

Hemangiopericytomas are rare intracranial neoplasms that generally occur in the fifth decade of life and are commonly dural-based, supratentorial tumors. They are classified as World Health Organization grade II or III because of their aggressive nature with high rates of local recurrence and distant metastasis. This case is of an intraventricular hemangiopericytoma in a 23-year-old man. Intraventricular locations are rare, with only 10 cases reported in the literature. Our patient is the youngest to be diagnosed with an intraventricular hemangiopericytoma outside a pediatric case discovered at autopsy.

CLINICAL PRESENTATION:

A 23-year-old man with a left intraventricular hemangiopericytoma presenting with headache, word-finding difficulties, blurred vision, nausea, vomiting, photophobia, and right-sided weakness and numbness. Using a left superior parietal lobule approach, a piecemeal resection was completed, achieving radiographic gross total resection. Pathology was consistent with a hemangiopericytoma. He was treated adjunctively with 60 Gy of local radiation. At 6-month follow-up, the patient had resolution of his aphasia and improvement in his headaches, with no signs of recurrence or metastasis on imaging.

CONCLUSIONS:

Standard treatment for central nervous system hemangiopericytoma includes aggressive surgical resection. The role of adjuvant radiation is less well defined but is commonly pursued postoperatively. Regardless of extent of resection or adjuvant treatment, close follow-up to evaluate for evidence of local recurrence and distant metastasis is essential.