› Childs Nerv Syst. 2023 Mar 3. doi: 10.1007/s00381-023-05904-5. Online ahead of print.

H3 K27-altered diffuse midline glioma presenting as massive cerebellopontine hemorrhage

Tej D Azad # [1], Anita L Kalluri # [1], Landon J Hansen [1], Adam Ammar [1], Alan R Cohen [2] [3]

1 Department of Neurosurgery, Johns Hopkins Hospital, Baltimore, MD, USA.
2 Department of Neurosurgery, Johns Hopkins Hospital, Baltimore, MD, USA. alan.cohen@jhmi.edu.
3 Department of Pediatric Neurosurgery, The Johns Hopkins University School of Medicine, Phipps Building 554, 600 N Wolfe St, Baltimore, MD, 21287, USA. alan.cohen@jhmi.edu.
# Contributed equally.

PMID: 36867241 DOI: 10.1007/s00381-023-05904-5

Abstract

We report the case of a 14-year-old boy who presented with extensive cerebellar and brainstem hemorrhage. Our presumptive diagnosis was a ruptured arteriovenous malformation (AVM), but two cerebral angiograms showed no significant vascular abnormalities. The patient underwent posterior fossa craniotomy and microsurgical evacuation of the hematoma. Pathological analysis of the hemorrhagic tissue made the diagnosis of diffuse midline glioma, H3 K27-altered (WHO grade 4), based on immunohistochemistry. He subsequently developed diffuse craniospinal leptomeningeal disease and progressed rapidly, with respiratory failure followed by severe neurologic decline without further hemorrhage. He was compassionately extubated at the request of the family and died before initiation of adjuvant therapy. This unusual case of a diffuse midline glioma presenting with massive hemorrhage underscores the importance of searching for an underlying etiology of hemorrhage in a child when a vascular lesion cannot be identified.

Keywords: Case report; H3 K27-altered diffuse midline glioma; Intracranial hemorrhage.

LinkOut - more resources

Full Text Sources

Springer