

63rd ANNUAL DIAGNOSTIC SLIDE SESSION 2022

CASE 2022 [#3]

Submitted by:

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Clinical History:

A previously healthy 2-year-old boy presented to the emergency department with several weeks of worsening headache and clumsiness, followed by acute profound deterioration with nausea and vomiting. Computed tomography of the head showed a mass centered in the fourth ventricle with associated hydrocephalus. Magnetic resonance imaging showed a large fourth ventricle tumor (3.8 x 3.7 x 4.6cm), exerting mass effect on the brain stem and cerebellum, with secondary obstructive hydrocephalus, and transependymal edema in the periventricular white matter. The patient underwent suboccipital craniotomy and resection of the tumor.

Material submitted:

Image of MRI brain (axial T2 FLAIR)

H&E-stained section of the fourth ventricular tumor

Points for discussion:

1. Discuss the differential diagnosis of this tumor
2. List ancillary studies including molecular characterization
3. Discuss clinical follow-up