55th ANNUAL DIAGNOSTIC SLIDE SESSION 2014

CASE 2014-5

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Clinical History:
The patient is a 5 year old female with a history of macrocephaly, developmental delay, seizure disorder, and cerebellar ectopia. She underwent neuroimaging in the form of CT or MRI periodically, the last of which was a head CT obtained 20 months prior to presentation and was normal. She presented to the emergency room with bilateral lower extremity weakness lasting about two hours with concomitant headache, and one episode of emesis. Two weeks prior to presentation, she had had a viral upper respiratory infection. There was no history of trauma. The emergent head CT and subsequent brain MRI showed an intensely enhancing mass (measuring 5.1 cm x 3.1 cm x 3.1 cm) in the right parasagittal frontal lobe. The mass was associated with extensive vasogenic edema of the right frontal lobe and leftward shift of the midline structures. Excision of the lesion was attempted where the tumor “seemed to blend into the brain”.

Material submitted: MRI images at initial presentation and H&E stained slide of the mass

Points for discussion:
1. Diagnosis and differential diagnosis
2. Immunohistochemical and genetic findings