52nd ANNUAL DIAGNOSTIC SLIDE SESSION 2011

CASE 2011-9

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Clinical History: A 15 year-old right-handed young man presented with new onset of seizure activity, reported to be 30 seconds in duration consisting of generalized tonic clonic movements of all extremities with drooling, no apparent respirations, and no incontinence. Per report his eyes were open without gaze deviation. Following the event, the patient remained confused. There was no antecedent trauma. He had just returned from an uneventful day at school. His mother reported the history of a single seizure episode at one year of age unassociated with fever. A workup at that time included head CT and EEG, both of which were unrevealing. No other significant medical or surgical history was reported. He was up to date on vaccinations, had no allergies, and took no medications. He has two siblings that were born without clavicles.

On presentation, the patient was afebrile with a pulse of 114 beats/minute, blood pressure of 164/60, and a respiratory rate of 20/minute with a saturating hemoglobin at 97% on room air. He reported no headache, vision changes, or nausea/vomiting. He was alert but confused, requiring frequent redirection. He was oriented to person, place, and year. His pupils were equal, round, and reactive to light. All twelve cranial nerves were independently tested and found to be intact. Strength and sensory examinations and reflexes were unremarkable. No current seizure activity was appreciated. A complete metabolic profile and CBC were unremarkable. A noncontrast CT and subsequent MRI of the head with/without contrast showed a well-defined 1.1 x 1.6 cm mass in the left parietal lobe just posterior to the Sylvian fissure. There was surrounding edema and minimal enhancement with no midline shift appreciated. The cortical sulci, basilar cisterns, and ventricles were within normal limits. There were normal signal flow-voids in the circle of Willis and major dural venous sinuses. No signal abnormalities on diffusion weighted imaging were noted. MR spectroscopy did not suggest an astrocytic lesion. He was loaded on Dilantin and started on Decadron. After review of these findings, the patient underwent an image guided temporoparietal craniotomy with resection of the lesion.

Material submitted: 1.Virtual slides of the left temporoparietal lesion:
-H&E stained section
-Ki-67 immunohistochemically stained section
2. Digital MRI brain images, T1 and T2 (jpg files)

Points for discussion:
1. Diagnosis
2. Pathogenesis
3. Epidemiology
4. Treatment