CASE 2000 - 03

Submitted By: Philip J. Boyer, M.D., Ph.D.*, Peter J. Christ, M.D.#, Robert R. Eckert, D.O.#, David W. Allen, M.D. and Javed Towfighi, M.D.*
*Department of Pathology, Penn State University - Hershey Medical Center, Hershey, PA and #St. Joseph Medical Center, Reading, PA.

Clinical History:

The patient is a 21 year old student at a local university who sprained her ankle approximately 9 weeks prior to surgery; she did not immediately seek medical consultation. She was experiencing "light headedness" at that time. In addition, she stated that, when she walked, she veered off to the right; when standing still, she had a tendency to fall backward. She reported left sided headache during the 2.5 weeks prior to surgery. Her ankle continued to be painful and, approximately a week before surgery, she sought consultation with an orthopedic surgeon. While leaving the surgeon's office, she fell and was subsequently noted to have "jerking" movements of her right arm and leg. An outpatient CT scan was performed which identified a lesion and she was admitted for evaluation.

There was no known significant past medical history. Review of systems was unremarkable. Past social history was positive for occasional alcohol use and negative for tobacco and illicit drug use. General physical examination was unremarkable except for tenderness of the right ankle. However, neurologic examination revealed spasticity and dystonic movement of the right upper extremity, with slightly diminished strength of the right arm flexors and extensors. Mild spasticity was noted in the right lower extremity. Reflexes were brisk in the right upper and lower extremities. Cranial nerve examination was normal.

Magnetic resonance imaging identified two lesions:
(1) High left parietal convexity lesion, 2 cm, enhancing, interpreted as intra-axial by imaging, with extensive white matter edema with effacement of overlying sulci and slight lateral ventricle deformity; no corpus callosum encroachment was identified.
(2) Right posterior parietal lobe lesion, adjacent to atrium of the lateral ventricle, with radiographic features consistent with vascular malformation ("venous angioma").

Surgery was carried out. Neurosurgical intraoperative observation found the lesion to be extra-axial and falx / dura-based. It was excised, in fragments, aggregate dimensions approximately 2.6 X 2 X 1 cm.

Materials Submitted:
1. H&E stained section
2. Unstained section

Points of Discussion:
1. Differential diagnosis
2. Optimal stain / immunoperoxidase evaluation panel