

Case 2

Submitted by: William C. Halliday, M.D.
Department of Pathology (Neuropathology)
Children's Centre (Health Sciences Centre)
Winnipeg, Manitoba

Clinical Abstract: This 11 1/2 month old girl was born to unrelated, healthy, middle age parents after a normal and uneventful pregnancy and birth. Apgar scores were 8 and 9 at 1 and 5 minutes, respectively. Birth weight was 3.6 kg. and head circumference (HC) was 35 cm. Starting at age 8 days, she developed a severe seizure disorder which was never fully controlled. The initial EEGs showed synchronous paroxysms of 'high voltage' activity (consisting of slow waves, multiple sharp waves) separated by attenuation of background activity. The paroxysms and attenuation were more marked on the left than the right. CT scan revealed a mild asymmetry in the size of the cerebral hemispheres. Nuclear flow scans demonstrated an asymmetry in perfusion, with more flow to the left than to the right cerebral hemisphere. Failure of medical management prompted consideration of a hemispherectomy and a neurosurgery consult was sought. The child died prior to the resolution of considerations related to surgery.

At autopsy the HC was 44 cm. and the visceral pathology consisted only of aspiration pneumonia. The brain weighed 750 grams; a kodachrome of the cerebral hemispheres is enclosed.

Material Submitted: The slide (H&E) was prepared from a sample taken from the left cerebral hemisphere (either superior temporal lobe, parietal lobe or frontal lobe).

Points for Discussion:

1. Diagnosis.
2. Does surgery have a role to play in the treatment of this disorder?