CASE 8

Submitted by: M. P. Valsamis, Albert Einstein College of Medicine, Bronx, N. Y.

A 6 month old white boy was admitted to the hospital because of cranial enlargement. Past history indicated temperature elevations over a 3 month period, and a fall 10 days before admission followed by vomiting. A diagnosis of bilateral subdural hematomata was made. Operations confirmed this and because of repeated effusions, a subdural peritoneal shunt was inserted on 10/20/70. Repeated admissions for removal of subdural effusions and continuing seizures followed. Carotid angiography showed an avascular extracerebral area in the left parasagittal region. Another operation for adhesions was performed and a neoplasm was diagnosed. Subsequently, despite repeated ventricular taps, intracranial pressure remained high. CSF showed sheets of malignant cells. Workup for peripheral evidence of neoplasm including bone marrow examination were negative. Steroids and radiotherapy through the whole brain and spinal cord were started on 11/12/71. CSF pressure decreased; the child became more responsive. While treatment with radiation was proceeding, he improved slowly, was able to say a few words, but the right hemiparesis and visual field cut persisted. He was then treated with intrathecal methotrexate and subsequently ran a progressive downhill course, expiring on 5/20/72 at age 26 months.

Post-mortem examination revealed both kidneys to show multiple gray-white nodules ranging in size from 2.5 to 0.5 cm in diameter scattered throughout both renal cortices. No other areas of neoplastic involvement were seen. These were interpreted to be metastatic. Central nervous system examination revealed massive involvement of the cortex and subarachnoid space with extension to the dura of a gray fleshy neoplasm. Some areas appeared as if the entire cortex was replaced by neoplasm.

Sections submitted are from neoplasm obtained at autopsy from the central nervous system. Photograph is of the coronal section through the brain demonstrating massive involvement of the brain by neoplasm.

Points to be discussed:
1) Nature of the neoplasm.
2) Is this neoplasm primary to the central nervous system or its coverings?