

CASE 8

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A 4-year-old black boy was admitted to the hospital because of convulsions and unconsciousness after a fall from a porch. On x-ray no skull fracture could be found. An EEG showed grossly abnormal tracing in the right hemisphere with the highest voltage in the right posterior region. A right arteriogram presented no evidence of intracranial space occupying lesion. The patient was discharged after three weeks with a diagnosis of cerebral concussion and posttraumatic convulsions.

He was doing well on phenobarbital until about 5 months later when he suddenly developed uncontrollable seizures beginning on the left side. A subdural hygroma was suspected and temporo-parietal trephines were placed bilaterally. The dura was grossly tense and when incised brain extruded on the right almost like toothpaste. On the left the brain was also tight and bulging. There was no spinal fluid evident on either side. Attempts at draining the ventricles failed. No obvious mass was hit. Needle biopsy from the right hemisphere showed normal tissue with little fresh hemorrhage from the needling. Shortly after operation the patient died from respiratory failure.

On gross examination the brain was markedly swollen (1220 gms.), pale and showed some herniation of hippocampal gyri and cerebellar tonsils. On coronal sections, the right hemisphere was slightly larger than the left, but no gross lesions were present except for a needle track extending from the right lower anterior central convolution into the caudate nucleus without perforating the ventricle wall. There was no evidence of former subdural or subarachnoid hemorrhage or of cerebral contusion. No space occupying lesion was found.

The general autopsy revealed no alteration which could have been responsible for the swelling of the brain.