CASE 1994-7

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Case Reference Number

Clinical History : This 45 year old man had a ten year history of steady progressive cognitive decline. Initially, family members noticed that the patient's memory was failing and he seemed nervous and unable to concentrate. He was evaluated by a neurologist at age 37, who described weight loss, insomnia, and anhedonia but a normal neurological examination. He was referred to a psychiatrist and was diagnosed with a major depressive episode. At age 39, a magnetic resonance imaging scan revealed diffuse white matter disease and moderate cortical atrophy. Laboratory studies at that time included flourescent Treponemal antibody test, Vitamin B12, erythrocyte sedimentation rate, heavy metal screens, serum copper, ceruloplasmin, serum lactate, urine arylsulfatase levels, very long chain fatty acid levels, urine homocystine and a HIV antibody titer, all of which were unremarkable. The diagnosis of possible multiple sclerosis was entertained due to the presence of four oligoclonal bands in the cerebrospinal fluid, although the CSF protein was only 39 mg%.

The patient's cognition continued to worsen and eventually he required placement in a protected care setting. Age age 44, a misunderstanding with local police resulted in his incarceration, who did not recognize his dementia and did not realize he lived in the nearby care center. He was assaulted in the jail that night by a fellow inmate and suffered a frontal intraparenchymal hemorrhage and diffuse subarachnoid hemorrhage. He remained comatose until his death approximately 1 year later.

Autopsy Findings : At autopsy, evidence of the old cerebral trauma was seen with remote subarachnoid hemorrhage and a hemosiderin-lined cavity in the frontal pole. The white matter was discolored, more prominently anteriorly.

Materials Submitted:
1 - H & E section of cerebrum
1 - Unstained slide

Points For Discussion:
1. Diagnosis?
2. Pathogenesis?