CASE 1991-3

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CLINICAL ABSTRACT:

A 54 year old woman was admitted with hypoglycemia and coma. The patient had a history of a seizure disorder since childhood, and insulin-dependent diabetes with many complications including multiple hypoglycemic episodes, renal insufficiency, retinopathy and neuropathy. One year ago, after a right hip fracture, she developed right sided neurological deficits and speech impairment, believed to be secondary to cerebral infarction. Her mental status had deteriorated over several months prior to her final admission. On arrival at the emergency room, the patient was unresponsive to deep pain and did not move spontaneously. The pupils measured 3mm each and did not react to light. Corneal reflexes were present, but oculcephalic and gag reflexes were absent. The muscle tone was normal in the upper, and slightly increased in the lower extremities. The deep tendon reflexes were absent. There was a right Babinski reflex. The remainder of the examination was negative except for bilateral diffuse pulmonary rhonchi. The patient's blood glucose, measured after 1 ampoule of 50% dextrose, was 20mg%. The cerebrospinal fluid contained 1 r.b.c., 3 lymphocytes and 1 monocyte and its protein was 42mg%, glucose 65mg%. A head CT without contrast demonstrated cerebral and cerebellar atrophy. An EEG revealed diffuse generalized slowing with intermittent random sharp waves "consistent with encephalopathy of multiple etiologies". In spite of correction of blood sugar, the patient's neurological status remained virtually unchanged, and she died of cardiac arrest 3 days later.

NECROPSY FINDINGS:

At autopsy, bronchopneumonia, bilateral pleural effusions, diffuse glomerulosclerosis and peripheral neuropathy were found. In the cerebral hemispheres, brain stem and cerebellum, there were multiple, circumscribed, waxy, deep yellow lesions, ranging from 0.3 to 1.2 cm in greatest diameter.

MATERIAL SUBMITTED: Kodachrome of cerebellum and lower brain stem, one H&E slide, one unstained slide.

POINTS FOR DISCUSSION: Nature of lesions?