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Clinical History:

The patient was a 53 year old gentleman who lived alone. He had been discovered unconscious on, but recovered following treatment, to be discussed later. Two weeks later he presented with a history of increasing mental slowness, weakness, somnolence and urinary incontinence. No history of abnormal medication was obtained. On examination in the Emergency Department he was drowsy and somnolent with a blood pressure of 110/60, a heart rate of 70 per minute and a regular respiratory rate of 18. His temperature was 35.8 and Glasgow coma scale was 15/15. Neurological examination documented normal cranial nerves, and his motor strength was normal. The patient was uncooperative, and cerebellar testing could not be performed. A right upgoing plantar reflex was recorded. Laboratory results showed a white blood cell count of 10.3, hemoglobin of 129, platelets of 425, creatinine of 84 and a BUN of 5.1. All other electrolytes were normal. A CT scan on admission showed bilateral basal ganglia infarcts, and a chest x-ray showed a left lower lobe infiltrate. On the following day there were no localizing signs noted. The EEG done 17 days later documented diffuse slowing which was maximal in the left fronto-temporal region. Over the next 4 days he progressively deteriorated, and was unconscious withdrawing only to pain. There was a flexed posturing. An MRI confirmed the basal ganglia infarcts and extensive white matter changes. The patient deteriorated progressively and developed fixed and dilated pupils. Palliative measures only were undertaken, and he died three weeks after his admission.

Material submitted: H&E section of cerebrum

Points for discussion: 1. Diagnosis
2. Pathogenesis