CASE No 3

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This 78 year-old retired high school chemistry teacher and principal suffered from gradually progressive neurological deterioration, during the final decade of his life. Initial problems included forgetfulness and difficulty in performing complex, multistep tasks. Several years later, he began to have decreased speech output and his gait became less steady with frequent falls. Past history was positive for prostate cancer, resected 10 years previously. There was no family history of neurological problems. He was evaluated at the UBC dementia clinic at age 77. At that time, he was complaining of mild swallowing difficulty with occasional choking on both solids and liquids. He had also become incontinent of urine and feces. Examination found him to be alert and co-operative but with limited insight and difficulty in understanding and following commands. His speech was slow with frequent word finding difficulties. He had poor concentration, and reduced short-term memory. Muscle strength was normal and there was no extrapyramidal dysfunction. Sensation and reflexes were intact. Cranial nerve and cerebellar testing was normal. His slow and unsteady gait was felt to be apraxic. General examination and all laboratory tests were normal. CT scan of the head demonstrated diffuse cerebral atrophy, most severely affecting the mesial temporal lobes, and mild ventricular enlargement. During the final year of life, his memory, speech and gait continued to deteriorate and he died of aspiration pneumonia.

Materials submitted: HE stained section of hippocampus.

Question: Diagnosis?