

**Canadian Association of Neuropathologists**  
**L'Association Canadienne des Neuropathologistes**

**CASE No 5**

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The patient was a 56 year old single female librarian who presented with a 2 month history of intermittent numbness and tingling of her lower extremities. She admitted to confusion and personality changes, inappropriate vocalizations and occasional aphasic staring spells. She suffered from rheumatoid arthritis for which she was taking methotrexate and diclofenac; she had stopped adalimumab injections 2 months earlier; she was on calcium and Vitamin D supplements. There was no travel history. No visual complaints, weakness, facial changes, dizziness, clumsiness, headache or constitutional symptoms were elicited. She denied drug or tobacco use, and stated she consumed no more than one alcoholic beverage daily.

On examination her vital signs were normal, and she looked generally well. General physical exam was normal. Cranial nerve examination was normal. Strength and sensation were normal in upper and lower limbs. Coordination and gait were normal. She had generalized hyperreflexia (3+) and non-sustained ankle clonus. Her mental status was normal, except for slow responses, inattention and slight word-finding difficulty.

Neuroimaging showed bifrontal white matter hypodensity and leptomenigeal enhancement. CSF protein was elevated (0.75 g/ml) and white cells were noted (32/ml). CSF gram stain, acid fast stain, 16s rRNA and culture were negative. Blood work was normal. She continued to deteriorate and became moribund and markedly cognitively impaired. She underwent right brain biopsy.

Material submitted: H&E-stained section of right frontal cortex

Question:                   Diagnosis?