A 59 year-old woman presented with 15 days history of progressive gait instability and slurred speech. She had recurrence of breast cancer diagnosed five years before. Neurological examination showed dysarthria and ataxia. Brain magnetic resonance imaging (MRI) presented hyperintense sign in the superior cerebellar vermis and upper cerebellar hemispheres, without atrophy (Figure). Cerebrospinal fluid (CSF) revealed lymphocytic pleocytosis. Cerebellar degeneration is one of the most common neurological paraneoplastic syndromes. The most frequently associated tumors are: breast, ovary and lung cancer, and also lymphoma. Early brain MRI is frequently normal or shows a diffuse enlargement of cerebellar hemispheres; rarely, there are signal changes in the cerebellar cortex. After a few months, atrophy of the brainstem and cerebellum may appear.

References