Rapid onset cognitive decline, Atypical presentation in multiple sclerosis (MS) : Case report

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Background

In general cognitive disability was presented in the later stages of disabling MS and more vulnerable in chronic progressive disease. A number of patients with MS who had early onset cognitive abnormalities were recognized, but very rare.

Objective

We describe a patients with rapid cognitive decline and left side weakness in 1 week. MRI brain and brain biopsy compatible with multiple sclerosis according to McDonald criteria 2010

Result

A 62 year-old right handed woman presented with 1 week PTA of rapid cognitive decline. She came to the hospital in June 2013

7 months PTA : She developed subacute onset left side weakness and numbness. Medical record showed left side weakness (MRC grade IV) and slightly right leg weakness with increased tone on the left side. She had mild dysarthria. MRI brain was done. She was diagnosed neurocysticercosis. She was received albendazole 800 mg/day and prednisolone 30 mg/day for 6 days for preventing cerebral edema. Clinical was improved during follow up.
1 weeks PTA : Her daughter noticed that her mother was confused. She did anything slowly. She didn't talk much as usual. Her symptoms progressed to the stage that she could not do routine activity, for example : dressing, bathing. She was referred to hospital in June 2013. No history of neurological or psychiatric disease in her family. Neuropsychological examination was performed. The patient was inattention, reduced production of speech, impaired naming and comprehension. Frontal lobe releasing sign were positive. Visual field demonstrated left homonymous hemianopia.

Blood tests, which included ESR, blood cell count, tests for Hepatic, renal and thyroid function was normal. Tests for serum NMO IgG, paraneoplastic screening, Anti-HIV, cysticercosis antibody and toxoplasmosis IgG were Negative. CSF profile showed mild increase of protein concentration and oligoclonal band was negative.
MRI brain was performed in first episode, November 2012 and June 2013 suggested active immune demyelinating disease and compatible with multiple sclerosis according to McDonald criteria 2010. Microscopical examination of the right parieto-occipital cortex under stereotactical conditions showed active demyelinating leision.

Conclusion

This patient diagnosed multiple sclerosis. Who has some atypical presentation. First one, atypical age of onset for multiple sclerosis and other point the patient presented with rapid cognitive decline, which is very rare manifestation in early stage of multiple sclerosis.