A diagnostic dilemma: acute disseminated encephalomyelitis following herpetic encephalitis or multiple sclerosis (MS)?

Cristina Baetu1, I. Buraga1,2, G. Mihailascu1,2, and A.M. Enachi1

1Neurology, Colentina Clinical Hospital, Romania
2Neurology, University of Medicine and Pharmacy “Carol Davila”, Romania

Correspondence: cristina.bcris@yahoo.com

By definition both ADEM and MS cases must manifest disseminated disease of central nervous system. ADEM is an uncommon monophasic idiopathic inflammatory demyelinating disease; it usually develops after an acute viral infection, vaccination or organ transplantation.

We present the case of a female patient, age 50 who was admitted in our hospital with abrupt onset of fever, confusion and aphasia. Initial lab tests revealed increased levels of herpes virus (IgM and IgG). Serological tests for other common neurotropic viruses and parasites were negative. Magnetic resonance imaging showed multifocal changes in the brain parenchima mainly in the white matter so she started treatment with high doses of methylprednisolone. The CSF IgG index and oligoclonal bands were positive; Electroencephalogram revealed epileptiform activity.

Is it ADEM following acute viral infection or is it atypically multiple sclerosis? Did the herpes virus triggered ADEM or MS? We will present the differential diagnosis with the final results and outcome of our case.

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