

REversible Splenial LEsion Syndrome (RESLES) after H1N1 infection

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Objective:

Reversible splenial lesion syndrome (RESLES) is a disorder radiologically characterized by reversible lesion in the splenium of the corpus callosum (SCC) with a DWI signal hyperintensity and a decrease in ADC map.

Pathogenesis:

The splenial lesion is probably due to edematous and/or inflammatory changes during encephalitis/encephalopathy. Most of the cases described in literature dealt with asiatic population

Results:

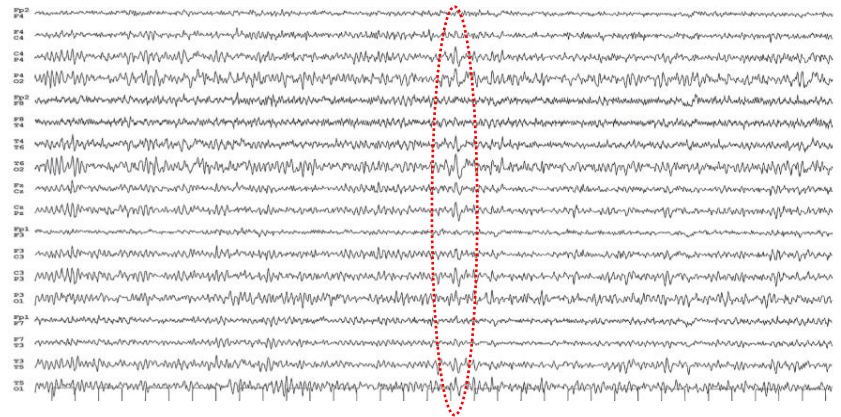
In this case report we describe the history of a 32 years old female at 50 days after childbirth. She was admitted at our emergency room because of relapsing, short lasting, episodes of blurred vision 2 days after fever and flu like syndrome.. CT scan, neurological examination and blood tests were unremarkable. On EEG performed at 24 hours from symptoms onset, focal occipital epileptic discharges with sharp waves were depicted (see Fig 1). On MRI scan, an ovoidal lesion in the splenium of corpus callosum was depicted with hyperintense signal in DWI and FLAIR, ADC restriction and hypointensity on T1 weighted imaging before and after gadolinium injection (see Figs 2).

CSF examination was unremarkable, blood test only revealed CRP elevation whether pharyngeal buffer was positive for influenza virus H1N1 infection. Because of breast feeding, the patient denied any pharmacological treatment and fully recovered in a couple of days. On follow up MRI conducted after two weeks the splenial lesion has disappeared (see Figs 3).

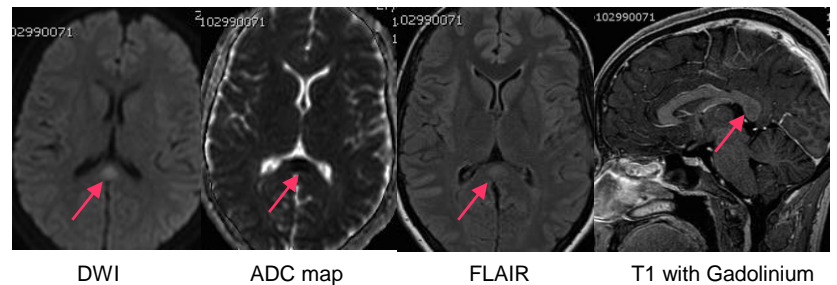
Discussion:

RESLES due to H1N1 infection is a well-known syndrome among eastern population, whether few cases were previously described in Western countries. Clinical course is usually favourable despite the use of any medication

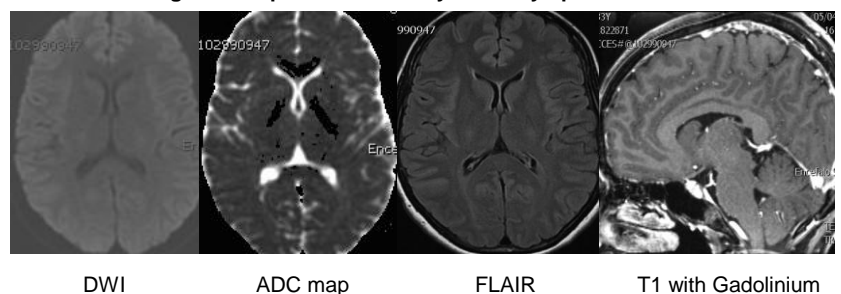
Fig 1: EEG performed the day after the occurrence of visual disturbances



Figs 2: MRI performed 24 hours after symptoms onset



Figs 3: MRI performed 14 days after symptoms onset



References:

- 1 N. Bulakbasia, M. Kocaoglua, C. Tayfun
Transient Splenial Lesion of the Corpus Callosum in Clinically Mild Influenza-Associated Encephalitis/Encephalopathy, AJNR Am J Neuroradiol. 2006 Oct;27(9):1983-6.
- 2 Ito S, Shima S, Ueda A, et al
Transient splenial lesion of the corpus callosum in H1N1 influenza virus-associated encephalitis/encephalopathy. Intern Med. 2011;50(8):915-8. Epub 2011 Apr 15