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Letter to the Editors

Psychiatric syndromes secondary to central nervous system infection

Dear Editor,

We read with interest the case report by Baldaçara et al.¹ who described an adult woman with autistic behavioral tendencies possibly linked to pneumococcal meningoenzephalitis in her childhood.¹ This is a unique case as it is possibly the first reported autistic syndrome after pneumococcal meningoenzephalitis. As the authors properly stated, late complications of central nervous system can mimic complex psychiatric disorders such as autism, depression and psychosis.²

Nevertheless, the understanding of the pathogenesis of behavioral syndromes in this context is complex. For instance, in an experimental model of pneumococcal meningoenzephalitis, infected rats developed depressive-like behavioral changes in parallel with alteration of TNF-alpha levels in the prefrontal cortex (but not hippocampus).³ Imipramine - a tricyclic antidepressant - was capable of reverting this behavioral phenotype and normalizing TNF-alpha levels.⁴

Based on the coronal magnetic resonance imaging as well as cognitive and behavioral symptoms reported, the patient seems to present diffuse cortical lesion, making it difficult to assume localized or circumscribed cerebral damage (i.e. amygdala-hippocampal). Therefore, it is complicated to conclude that "this case illustrates the importance of medial temporal lobe in social development." Moreover, it would be quite interesting to have information on how behavioral changes evolved in this patient after the meningoenzephalitis episode, as well as its severity.

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* Modest

** Significant

*** Significant. Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.

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