

Rapidly progressive sporadic Creutzfeldt-Jakob disease: isolated Heidenhain variant or a combination with PRES?

Doença de Creutzfeldt-Jakob esporádica rapidamente progressiva: variante Heidenhain isolada ou PRES combinada?

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A 70-year-old man presented with rapidly progressive cognitive impairment with ataxia and myoclonus. Visual agnosia was noticed after blood pressure oscillations, during immunoglobulin therapy for suspected autoimmune encephalitis. Brain magnetic resonance imaging scans before and after visual agnosia are presented in Figure 1. Electroencephalogram disclosed periodic sharp wave complex, and cerebrospinal fluid

was positive for 14-3-3 protein. The final diagnosis was probable Creutzfeldt-Jakob disease (CJD) associated with posterior reversible encephalopathy syndrome (PRES). Blood pressure and immunoglobulin therapy may explain PRES¹. It seems that some types of CJD prion proteins could induce the activation of microglia and dysfunction of vasoconstrictors upregulation, leading to vasospasm, ischemia and PRES^{1,2}

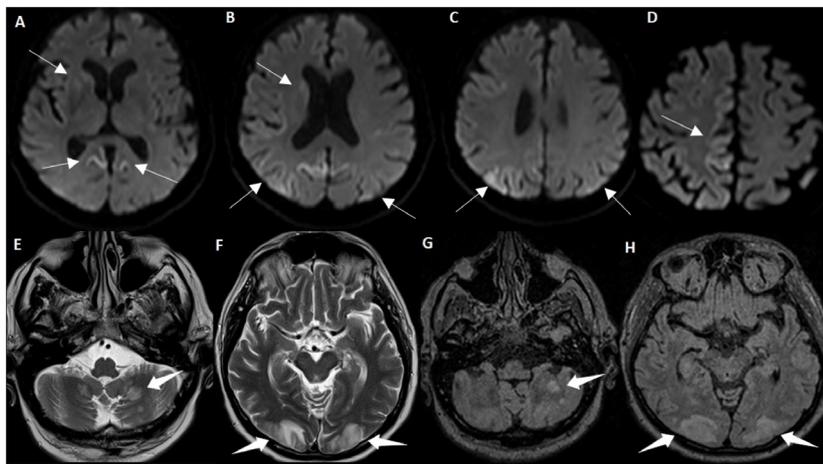


Figure 1. Magnetic resonance imaging features of sporadic Creutzfeldt-Jakob disease and posterior reversible encephalopathy syndrome. (A, B, C and D) Initial diffusion-weighted images revealing bilateral hyperintensities in parietal areas, mostly on the right, and hyperintensities in cingulate gyrus. The same findings apply albeit to a lesser extent in the right basal ganglia (caudate and putamen, white arrows). (E, F, G and H) T2WI and T2-fluid-attenuated inversion-recovery reveals new cortico-subcortical hyperintensities in parietal and occipital areas and cerebellum, compatible with vasogenic edema, highly suggestive of PRES (thick white arrows). Previously described alterations remain the same. T1W1 does not reveal contrast enhancement.

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