

Posteriore Reversible Encephalopathy Syndrome: an unusual case history

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Background: Posterior reversible encephalopathy syndrome (also known as PRES Syndrome) is a clinical-radiological syndrome characterized by specific symptoms such as headache, seizures, visual disturbance, status epilepticus associated with acute or chronic kidney disease and often, not always, with acute hypertension. PRES is strangely associated with conditions that coexist with renal disease, such as vascular and autoimmune disease, hypertension, immunosuppressive drugs, organ transplantation; it can be a compliance of a rapid and massive blood transfusion, too. MRI's images are characteristics: we can find white matter abnormalities in the posterior regions of both cerebral hemispheres, mostly occipital and parietal lobes; infact the term PRES is based on MRI's imaging. If promptly treated, the clinical symptoms resolves in a week, while MRI's changes resolves in days until weeks.

Case History: Male, 37 years old, black race, came in Emergency Room for status epileptics. In clinical history hypertension. Blood exams, liver function, renal function and coagulation were normal. The CT scan of the head was normal two times. The EEG a specific. At MRI there were white matter abnormalities in both parietal lobes. After anticonvulsant and antihypertensive therapy the clinical symptoms resolved in few days.

Discussion: The diagnosis is very difficult: symptoms are various and a specific: altered consciousness can vary from mild confusion to coma; stereotypic movements of eyes or head can be present, visual disturbance can vary from blurred vision to cortical blindness. Pathophysiology is not known: perhaps failure of cerebral auto regulation and endothelial damage can lead to blood-brain barrier disruption and then to protein transudation. The differential diagnosis is very difficult and it can be mistaken for brain stroke, psycosis, and drugs intoxication. The effective therapy includes anticonvulsive therapy, immediate control of blood pressure and, in case of LES-related PRES, corticosteroids and cyclophosphamide. Delayed diagnosis and delayed treatment can lead to irreversible neurological deficit or death; promptly treatment lead to complete resolution.

References

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