CASE REPORT

A 38-year-old multigravida with no personal history of neurological diseases experienced severe headache and partial complex seizures at 7 days postpartum; cerebral thrombosis was suspected and the patient was admitted to our Stroke Unit. Results. On admission neurologic examination was unremarkable. Severe hypertension (170/105 mmHg) and proteinuria were observed, whereas renal and hepatic function tests were normal. In the following three days fever with altered consciousness, complete blindness and complex partial seizures occurred. Cerebrospinal fluid analysis (CSF) and brain MRI with angiography and venography ruled out thrombosis or infectious process and the diagnosis of PRES was suspected.

EEG (Fig.1) showed paroxysmal activity started from posterior left regions (a,b,c) and after 24 hours continuous bilateral delta activity was recorded (c,d).

Fig.1

T2-Flair brain MRI (Fig.2) demonstrated confluent cortical and subcortical vasogenic edema in both cerebral hemispheres, particularly involving parieto-occipital lobes.

Fig. 2

Therapy with antiepileptic drugs, antihypertensives, magnesium sulfate IV (2 g per hour for 48 hours) with close monitoring of magnesium level was administered and blood pressure levels returned to the normal range in the following 24 hours. Three days later the patient had no further seizures, fully recovered, and was discharged on day 7.

Follow-up. Brain MRI (fig.3) and EEG recordings (fig.4) performed one month later were unremarkable. The diagnosis of PRES related to a delayed postpartum eclampsia was confirmed by MRI, EEG and clinical course.

Fig. 3

Discussion: PRES is a clinic-radiologic syndrome associated with several medical conditions, including hypertensive encephalopathy and eclampsia. Eclampsia usually presents with generalized convulsions in pregnant or puerperal women between 20 weeks' gestation and the first 48 hours postpartum. On the contrary late postpartum encephalopathy is a rare condition that occurs between 48 hours and 1 month postpartum.

Conclusion: This case illustrates the difficulty to recognize and diagnose late postpartum PRES, a reversible condition if appropriately treated. However, it is important to early identify and to treat the etiological factors of PRES, since this condition could progress from reversible vasogenic edema to irreversible ischemic damage if appropriate treatment is not promptly administered.

References

Ducros A. Reversible cerebral vasoconstriction syndrome. Lancet Neurol (2012);11(10):906-917