When things get complicated but are reversible…

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From the Lisbon Stroke Summit, Lisbon, Portugal. 7–8 April 2017.

Abstract

Clinical Report: The patient was a 33-year-old Nepali woman, living in Portugal, previously healthy, thirty-three weeks pregnant, with second trimester gestational diabetes. She was admitted at the gynecology emergency room with preeclampsia and HELLP syndrome, and underwent urgent cesarean delivery for fetal bradycardia. She was then transferred to the intensive care unit due to clinical worsening, resistant hypertension, acute kidney injury and non-cardiogenic pulmonary edema. When a decrease of sedoanalgesia was attempted, significant psychomotor agitation ensued. Head CT scan showed signs of Posterior Reversible Encephalopathy Syndrome (PRES), namely in the bilateral parietal and occipital cortico-subcortical areas. A second CT scan showed hypodensity of the left fronto-temporo-parietal cortico-subcortical area, clinically associated with right hemiplegia. Two weeks later, hemorrhagic conversion of the left cerebral hemisphere injury ensued, without mass effect or increased extension. Electroencephalography was normal and transcranial doppler showed mild vasospasm in major arteries. Two months later, there was clinically significant improvement, with the patient showing normotensive profile and total renal function recovery, even though maintaining aphasia and moderate right hemiparesis, partially improved. MRI showed favorable evolution of PRES signs.

Conclusions: This case represents an example of PRES associated with HELLP syndrome, with unusual involvement of anterior cerebral areas. The anterior left injury was probably multifactorial, including autoregulatory failure in a non-chronic hypertensive patient, endothelial dysfunction associated with preeclampsia and local hypoperfusion with cerebral infarction due to reactive focal vasoconstriction (described in more severe cases). Hemorrhagic conversion is also an unusual event.