Thunderclap headache PRES-related during puerperium in patient with tension-type headache: a real case

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Introduction

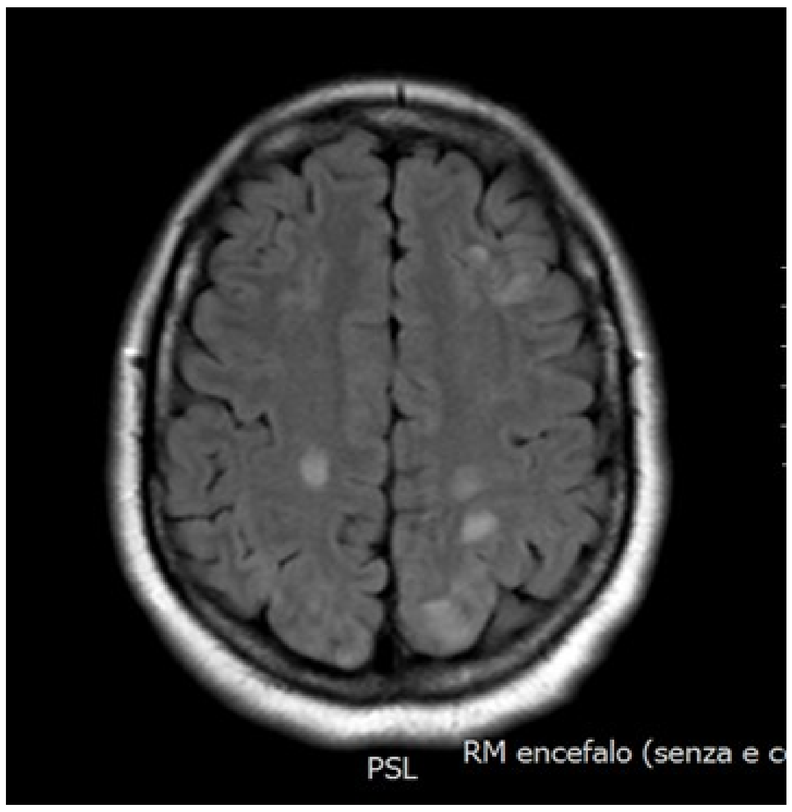
Posterior reversible encephalopathy syndrome (PRES) is a clinical radiographic syndrome of heterogeneous etiologies grouped together because of similar findings on neuroimaging studies. It is an uncommon cause of secondary headache. Hypertension and endothelial dysfunction play a key role in the development of vasogenic white matter edema. Common associated conditions are hypertension encephalopathy, preeclampsia and other pregnancy related hypertension disorders and immunosuppressive therapy.

Case Report

A 35- years old woman was admitted for iper-acute onset of intense headache (NRS =10) with pressing/tightening quality, bilateral location and nausea. No prodromic symptoms were related. Patient was puerpera (9 days post partum). Past medical history included infrequent episodic tension type headache associated with pericranial tenderness controlled with FANS on demand. No intracranial lesions were described at the CT scan. The new headache was different in quality if compared with typical TTH and was treated with FANS at ER. Recovery was not suggested. Before discharge a new CT scan was done because of the onset of a generalized tonic clonic seizure, treated with intravenous midazolam. The CT showed small posterior parietal hyperdense lesion described as hemorrhage and the patient was hospitalized. Focal neurological deficit were not reported. At a new CT scan after 24 hours the hemorrhage was stable and new little hypodense diffused lesions were described. Neurological examination showed mild sonnolence with the persisting of moderate headache treated with FANS without a real benefit. The MRI showed numerous punctate asymmetric areas of increased signal on T2 weighted images with hypo-isointense signal on DWI compatible with white matter edema localized in frontal, posterior parietal regions and in the brainstem and in the posterior cerebellar hemispheres. These findings were compatible with posterior reversible encephalopathy syndrome. During recovery patient showed a progressive spontaneous reduction of headache and an improvement of consciousness. Because of the breastfeeding and the spontaneous improvement of symptoms an AED therapy was not started. Obstetric evaluation concluded for a late postpartum preeclampsia without the requirement of specific therapy. An MRI after 15 days showed a complete resolution of radiological findings.

Discussion and Conclusions

Clinical manifestations of PRES can be very different and diagnosis could be not simple. Headache is the most frequent symptom, described as costant, non localized, moderate to sever, non responsive to analgesia. If the patient has a story of primary headache, the new one is described as different in quality and onset if compared with the typical headache .Other symptoms like altered consciusness (from mild somnolence to coma), visual disturbance (hemianopia, visual neglect, visual hallucinations) and seizures can be described. In this case the only presence of headache in a patient with TTH complicated the diagnosis. However, instrumental studies in association with history and clinical follow-up allowed us to confirm the diagnosis of posterior reversible encephalopathy syndrome in late puerperium preeclampsia.



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