Case (059) Posterior reversible encephalopathy syndrome due to

atypical postpartum eclampsia

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## **CASE PRESENTATION**

A 38 y/o female who gave birth to a healthy child developed in the immediate postpartum period headache secondary to post-dural puncture for epidural anesthesia. Four days after childbirth and due to persistence of the headache despite symptomatic treatment, corticosteroids were prescribed.

At this time hypertension was found being initially considered secondary to the corticosteroid therapy. On day 7 after childbirth, symptoms got worse; a brain CT scan was performed yielding abnormalities due to intracranial hypotension.

On day 10, she developed a generalized tonicclonic seizure. An urgent brain MR showed bilateral cortico/subcortical T2/FLAIR hyperintensities in both frontal and parieto-occiptal regions, with normal ADC values. Findings suggested posterior reversible encephalopathy syndrome (PRES).

Venous infarction secondary to intracranial hypotension and sinus venous thrombosis (SVT) were included in the differential. On day 11, the patient had two focal seizures and a second CT scan showed left frontal intraparenchymal hemorrhage (IPH) and convexity subarachnoid hemorrhage (SAH). Proteinuria was found. All things considered - MR findings, hypertension and proteinuria- she was diagnosed with PRES due to atypical-late postpartum eclampsia and with an atypical imaging presentation that included IPH and SAH. Follow-up MR showed hemosiderin in the prior site of the IPH with dissapearence of the rest of the lesions.

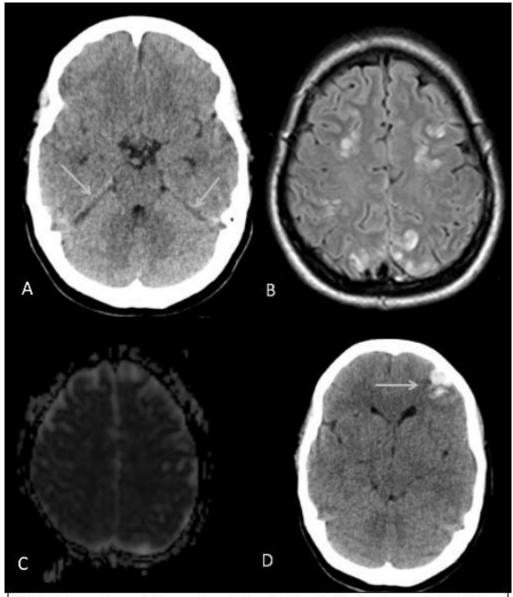
## DISCUSSION

Headache and seizures in pregnant and postpartum women are a diagnosis challenge. Both are common manifestations of SVT, PRES and intracranial hypotension. These entities can also have similar imaging findings. Eclampsia is a risk factor for PRES.

However, late postpartum eclampsia is a rare entity that can occur from 48 hours to 2 months after childbirth. Atypical manifestations of PRES include intracranial hemorrhage (20%).

## CONCLUSION

PRES due to atypical late postpartum eclampsia is a rare entity that should be suspected from 48 hours to 2 months after childbirth in women who developed seizures and hypertension. One must be careful not to misdiagnose this as a disorder unrelated to pregnancy when it happens after childbirth



(A)Cranial nonenhanced CT scan shows bilateral subdural collections (arrows). (B). MRI FLAIR-WI demonstrates patchy bilateral fronto-parietal hyperintensities involving both grey and white matter (C) Normal ADC with no signs of acute ischemia. (D) Follow up CT scan shows a left frontal focal intraparenchymal hemorrhage (arrow).

## **BIBLIOGRAPHY**

- Men-Jean Lea, Debra Guinn et Susan Hickenbottom. Headache in pregnant and postpartum women. In: UpToDate, C.J. Lockwood, J.W. Swanson (Ed). UpToDate, Waltham, MA, 2018.
- Sharma A, Whitesell RT, Moran KJ. Imaging pattern of intracranial hemorrhage in the setting of posterior reversible encephalopathy syndrome. Neuroradiology. 2010 Oct;52(10):855-63.