Postpartum Posterior Reversible Encephalopathy Syndrome (PRES) After Postdural Puncture Headache

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Introduction:
- Posterior Reversible Encephalopathy Syndrome (PRES) is rare and characterized by insidious onset of headache, altered mental status, seizures and cortical blindness with posterior leukoencephalopathy on imaging studies.
- Incidence and pathophysiological mechanism are unknown, but it has been associated with hypertensive encephalopathy, immunosuppression and postpartum eclampsia.
- We describe a case of PRES associated with postdural puncture headache (PDPH) and Liquor Hypotension Syndrome (LHS).

Case Report:
- 25YO, G2P1, 39W+3D.
- ASA 2.
- Epidural analgesia for eutocic delivery (difficult technique with multiple attempts).
- Hemodynamic stability kept during labor and delivery.
- PDPH few hours after birth. Conservative management.

CT scan: A, B – bilateral occipital hypodensities; Venous-CT: C, D – thrombosis excluded
Brain MR imaging: A-E – hyperintense areas on T2/FLAIR within the bilateral parietooccipital lobes with vasogenic edema; patchy left parietal area with cytotoxic oedema.
Brain MR angiography: F – arterial vasospasm, specially at posterior circulation, and subdural effusions.

Treatment: Dorsal decubitus at 0º, hydration, paracetamol, NSAIDs, caffeine and nimodipine.
Evolution: Hemodynamically stable with clinical and imaging improvement.

Hospital discharge at D24 after complete recovery from blindness.
Asymptomatic at six month and one year evaluation.

Discussion:
- This is the third clinical case reported in literature.
- Clinical symptoms and neuroimaging findings are compatible with PRES.
- The exact PRES mechanism remains unknown. Temporal association of encephalopathy with diffuse cerebral vasospasm after an episode of PDPH / LHS may be causative.
- Prompt recognition and treatment of PRES/LHS are crucial to avoid the permanent damage leading to sequelae and mortality.

References: