



## AN UNUSUAL CASE OF POSTPARTUM ENCEPHALOPATHY

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## KEYWORDS :

- **Introduction:** Encephalopathy in post partum period is a common condition, especially in developing countries like India. Eclampsia, Venous sinus thrombosis and neuroinfections are the common causes in peripartum period. We report an unusual case of post-partum encephalopathy.
- **History and Examination:** A 23 years old right handed female presented to us with 3 days history of ataxia and dysarthria. One day before presentation to hospital, relatives noted altered sensorium. There was no history of fever, headache, vomiting or seizure. She has delivered a healthy child before 8 days (Full term, normal vaginal). On examination, pt was stuporous, with decerebrate posturing. Her pupils were bilaterally mid-dilated but reacting to light. She had intact dolls and corneal reflex. DTR were 2+ with mute plantars. There was no neck rigidity or focal neurological signs.
- **Investigations.** Complete blood picture, LFT & RFT were within normal limits. Serum sodium was persistently high (>165 mmol/l) and CK total was 3826. CSF analysis was normal. MRI on admission was suggestive of diffuse, symmetrical, T2/FLAIR and diffusion hyperintense lesion, involving white matter.
- **Outcome:** After thorough search for etiology (Serum and urine Osmolality, Cortisol and detailed renal function), gradual correction of hypernatremia was done. Patient improved slowly and was ambulatory after 2 weeks. She was discharged in stable condition by the end of 4 weeks. Repeat MRI on discharge, showed significant resolution of lesion.
- **Discussion:** Though uncommon, hypernatremia in postpartum period, causing encephalopathy has been described in literature.
- Various possible hypothesis of hypernatremia in postpartum period have been proposed:
  - 1- Tradition in 'Southern' India of restricting water and fluid intake during puerperal state
  - 2- Hypothalamic dysfunction
  - 3- Unmasking of Partial ADH secretion defect (enhanced peripheral breakdown by vasopressinase)
  - 4- Increased activity of a circulating placental protease with vasopressinase activity, leads to reduced AVP and polyuria.
- MRI findings are classical and may give a clue to diagnosis. (Champagne glass, on T2)
- **Conclusion :** In postpartum encephalopathy, hypernatremia should be ruled out as it is a reversible condition.

