

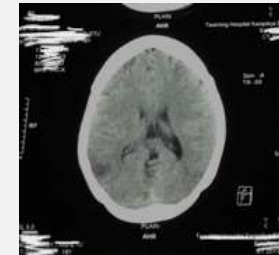
POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME ASSOCIATED WITH ECLAMPSIA

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Introduction: Posterior reversible encephalopathy syndrome (PRES) is a clinical and radiological diagnosis of a rare condition. It is clinically presented with headache, altered consciousness, visual disturbances, seizures and nausea and is radiologically characterized by vasogenic oedema in the posterior circulation of the brain¹. In addition, a patient may have hemianopia, paresis, dysphasia and other focal neurological deficits. Toxaemia in pregnancy, hypertension, autoimmune disease, renal failure and cytotoxic and immunosuppressive medications are the common precipitating factor for this condition. PRES is a reversible condition if diagnosed early. The pathophysiology of PRES is unknown but attributed to brain oedema secondary to endothelial dysfunction and failure in cerebral blood pressure autoregulation in the posterior circulation of the brain².

Case Presentation: Unconscious 18-year-old primi presented to the Emergency Treatment Unit (ETU) at 32 weeks of gestation with a history of one episode of convulsion. She didn't have any regular antenatal follow-ups, and there was no history of epilepsy or hypertension in her past. She had another four generalized tonic-clonic convulsions at the ETU. On admission, examination findings were blood pressure (BP)- 200/110 mmHg, pulse rate-110b/min, Glasgow Coma Scale-8 and urine albumin 4+ and Blood reports were Haemoglobin level-12g/dl, platelet count-360,000/mm³, Uric acid level-584mic mol/l, normal limit liver and renal function tests. Furthermore, CT finding was ill-defined hypo densified areas involving bilateral symmetrical parieto-occipital regions compatible with PRES changes. She was treated with Hydralazine and Labetalol for BP control and with Mgso₄ for neuroprotection. Single live fetus was delivered through emergency caesarian section. Post-operative intensive care was given for five days. Subsequently, she was discharged on following day after complete recovery.

Discussion and Conclusion: Eclamptic patients with PRES may present with seizures, altered consciousness, visual disturbances and focal neurological signs, which may mimic stroke. Diagnosis of PRES may be overlooked. Subsequently, it may lead to irreversible brain damage. Therefore, PRES should be considered in the presence of neurological symptoms, risk factors for PRES and absence of other possible causes of encephalopathy. In brain CT or MRI, there will be vasogenic oedema in the occipital and parietal regions. The standard treatment for PRES is treating the underlying cause. This index patient was treated with BP control and delivery. Meticulous clinical analysis and neuroimaging is helpful in early detection of PRES and prevention of permanent brain damage.



NCCT brain images showing bilateral parieto- occipital oedematous congestion

References:

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