

Osmotic demyelination syndrome in pregnancy: A case report

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ABSTRACT

Introduction: Osmotic demyelination syndrome (ODS) is a severe, uncommon complication that is thought to be caused by rapid correction or over-correction of hyponatremia, although the exact pathogenesis remains unknown. It usually presents with central pontine myelinolysis (CPM), in which the focus of demyelination is in the pontine region. The other form is extrapontine myelinolysis (EPM), in which demyelination occurs in the white matter of the cerebral hemispheres. Alcoholics, liver transplant recipients, hypokalemia, hypophosphatemia, diabetes mellitus, anorexia nervosa, hyperemesis gravidarum, and severe burns have been typically found in ODS patients. **Case Description:** A 23-year-old multipara, presented at 13 weeks gestation with vomiting, abdominal pain, fever, and cough for two weeks. Her serum electrolytes were grossly abnormal with severe hypokalaemia (K⁺ 1.6 mmol/L) and hyponatremia (Na⁺ 130). She received rapid correction of electrolytes. 24 hours later, she was found unresponsive and required intubation for airway protection. MRI brain high signal intensity at the pons on T2W/FLAIR with restriction diffusion. T2W/FLAIR high signal intensity at the bilateral external capsule, however, showed no restricted diffusion. These features were suggestive of osmotic demyelination syndrome with extrapontine myelinolysis. She miscarried spontaneously at 13 weeks 4 days of gestation. She stayed in ICU for 22 days. There was a slow but gradual neurological improvement in her motor and cognitive functions. She was subsequently transferred to a rehabilitation ward for further care. **Discussion:** Diagnosis of ODS should be considered in the differential diagnoses in pregnant women with acute neurological symptoms and a history of hyperemesis or hyponatremia.

End stage renal disease (ESRD) in pregnancy undergoing hybrid dialysis during the second trimester of pregnancy: A case report

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ABSTRACT

Introduction: Live birth rates are increasing over time in women on hemodialysis, whereas they remain lower and static on peritoneal dialysis. With the progress made in maternal, fetal care, and dialysis systems, the rate of successful pregnancies with delivery of surviving infants is 70%. **Case Report:** We describe the case of a 27-year-old, primigravida, a young hypertensive with ESRD secondary to crescentic IgA nephropathy. She had been on continuous ambulatory peritoneal dialysis (CAPD) since January 2023. She was found to be 18 weeks pregnant around three months after the initiation of CAPD. Her baseline urea and creatinine levels were 7.8 mmol/L and 603 mg/dl respectively. She decided to continue with the pregnancy after detailed counselling of the potential complications associated with ESRD. She had two admissions (at 19 and 25 weeks of gestation) for uncontrolled hypertension, which was successfully managed with a treatment combination of labetalol, nifedipine, and prazosin. After an MDT discussion, she was started on a hybrid dialysis regime (HD 2 days/week and CAPD 5 days/week), from 25 weeks of gestation. She received erythropoietin 80 mcg every 2 weeks and her haemoglobin levels ranged between 8 to 9 g/L throughout the second trimester. **Discussion:** Hemodialysis is the preferred dialysis modality in pregnancy. However, a successful pregnancy is possible in patients who received a combination of PD and HD. The choice of dialysis modality is based on availability, local expertise, anticipated dialysis efficiency, residual renal function, gestation, infection risk, and patient choice.