

Syndrome of Inappropriate ADH secretion in Pre-eclampsia

Case report

Dr Mohamed Baraka; Dr Salman Kidwai; Dr Shyam Sishadri

Objective:

We are presenting a rare case of severe hyponatraemia due to SIADH complicating preeclampsia, and how it was managed

Case report:

A 31 year- old nulliparous woman presented at 29+5 weeks of gestation with headaches, bloating and swelling of both legs.

On examination: She had a BMI of 22. blood pressure 160/104 mmHg, engorged neck veins, bilateral basal crepitations on chest auscultation and bilateral lower limb pitting oedema ,however, reflexes were normal.

Her blood pressure was controlled using Labetalol and steroids for lung maturation was given.

Investigations revealed a PCR of 166mg/mmol, blood tests: haemoglobin 103g/L, WCC 14000/mL, platelets 149000/mL, ALT 20U/L. albumin 21g/L, total protein 53g/L, Na 121mEq/L, K 4.3mEq/L, creatinine 81mmol/L, urea 6mmol/L, urates300mmol/L. Serum osmolality 260mOsmol/Kg, urine osmolality 673mOsmol/Kg. Short ACTH test ruled out Addison's disease.

Chest X-ray revealed pleural effusion.

Foetal well being scan showed normal growth.



The woman was inpatient under close observation, serial blood testing and reviews by both obstetric and endocrinology teams. She was restricted of fluids. The clinical features of volume overload, refractory hyponatraemia and the picture of exaggerated osmostat response, led to the decision of delivery five days after admission.

The woman was given MgSO4 and had caesarean section. 1.1Kg baby girl was delivered and admitted to NICU. The mother stayed on HDU for seven days, after which she was stepped down to postnatal ward. Apart from an initial postnatal rise of blood pressure and derangement of ALT, she made a good recovery and her serum sodium normalised on the third day postpartum.

On six weeks postnatal follow up, both mother and baby were very well and antihypertensive medications were stopped

Discussion:

Pre-eclampsia is a multisystem disorder with incidence ranging from 2% to 5%. Hyponatraemia is a rare complication of pre-eclampsia. Hyponatremia is defined as a serum sodium below 135meq/L. Once serum sodium drops below 120 mmol/L cerebral oedema, encephalopathy and death may ensue(Duggal A, Yadav P, Agarwal A et al.).

The exact mechanism of SIADH in preeclampsia is still not fully understood. (Sutton et al) proposed that the defective placenta in preeclampsia doesn't produce sufficient vasopressinase, an enzyme that inactivates ADH. Our patient had significant fluid overload and hyponatraemia and required delivery

Conclusion:

Given the seriousness of hyponatraemia to both mother and baby, monitoring of serum sodium should be a part of monitoring women with preeclampsia.