

A Case of SIADH in the setting of Pre Eclampsia

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Introduction

- Hyponatremia is a rare complication of pre eclampsia.
- We present a case of syndrome of inappropriate ADH secretion (SIADH) in the setting of pre eclampsia.

Case Report

- 40 year old lady was diagnosed with hypertension at 32 weeks gestation in her third pregnancy. She had a past history of pre eclampsia.

- She was started on Labetalol 100mg bd but needed admission at 34 weeks due to uncontrolled hypertension.

- Labetalol was increased to 200mg tds. She was discharged after four days with a sodium level of 129mmol/L.

- She was readmitted at 35 weeks with pre-eclampsia. Her sodium had rapidly dropped to **125mmol/L in just one week**

- Labetalol was increased to 300mg tds. Labour was induced in view of preeclampsia and low sodium levels. Dexamethasone injection was given twice twelve hours apart pre-delivery.

- Investigations for low sodium were consistent with **SIADH in the context of pre eclampsia** as shown in table 1. Patient was clinically euvolaemic.

- Fluid restriction was started. IVI rate was decreased from 166ml/hr to 41ml/hr.

- An emergency caesarean section was performed in view of signs of foetal distress on CTG monitor. A female infant was delivered with an Apgar score of 9 and sodium level of 127mmol/L.

- The mother's IV fluids were stopped. Her oral fluid intake was restricted to 1.25 litres/day on the first day post delivery and then to 2 litres/ day on the second day.

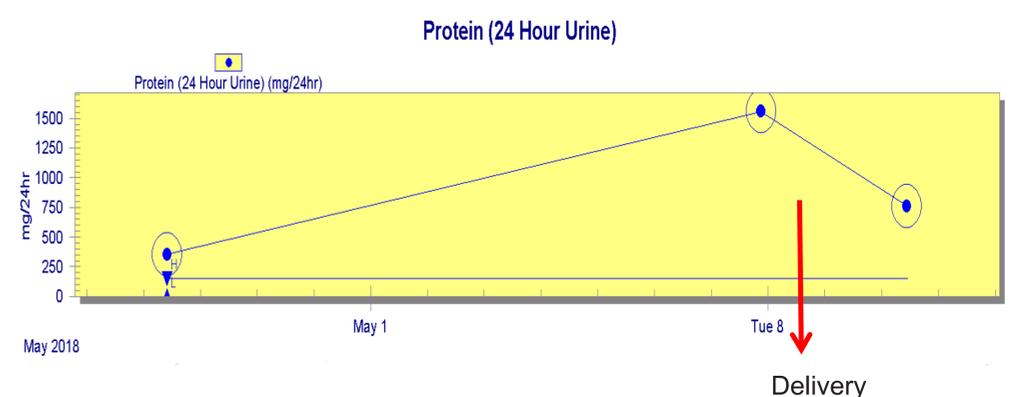
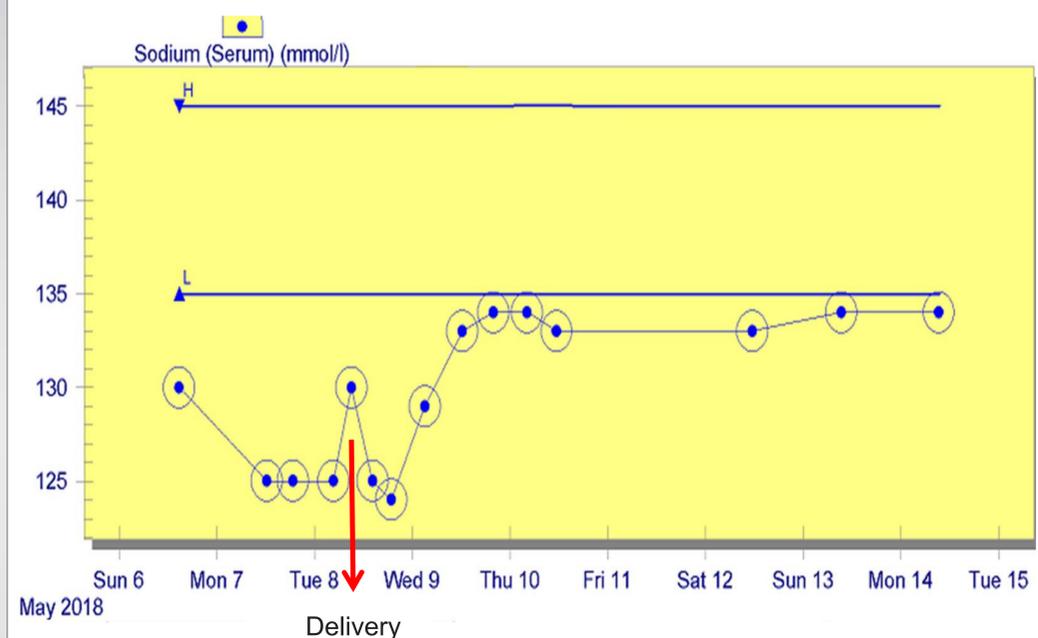
- Her sodium levels gradually improved from **125mmol/L to 134mmol/L** within 48 hours of delivery.

- Proteinuria decreased to 759.9mg/24 hrs while platelet count ($147 \times 10^9/L$) and uric acid normalised (313umol/L). She was allowed to drink to thirst.

- Both mother and child were discharged one week after delivery.

	Result	Range
Serum sodium	125mmol/L	135-145 mmol/L
Serum osmolality	269 mOsm/kg	282-300mOsm/kg
Urine sodium	38mmol/L	54-190 mmol/L
Urine osmolality	267mOsm/kg	50-1200mOsm/kg
TSH	1.78 micIU/ml	0.3-3 micIU/mL
T4	13.5 pmol/L	11-18 pmol/L
Uric acid	400umol/L	142-339umol/L
platelets	$91 \times 10^9/L$	$132-349 \times 10^9/L$
24 hr urine protein	1557.1mg/24 hrs	1-150mg/24 hrs

Table 1: Investigations on admission showing SIADH and Pre eclampsia.



Figures 1 and 2: Serum Sodium and 24 hr urine for protein improved significantly post delivery.

Conclusion

- Hyponatraemia in preeclampsia can lead to maternal and foetal complications. It further increases the risk for maternal seizures.
- Foetal sodium is $<130\text{mmol/L}$ can lead to foetal jaundice, respiratory distress and seizures.
- Decreased foetal ADH can cause increased urine output and polyhydramnios. Treatment includes maternal fluid restriction but this is not always effective. Indication of labour may be necessary.