

Letter regarding: Managing severe peripartum hyponatraemia: A case report, *Obstetric Medicine: The Medicine of Pregnancy*

To the Editor,

Re. Timothy AC Snow, Jerry Lim, Christopher M Laing, Niall S MacCallum, and David A Brealey. Managing severe peripartum hyponatraemia: a case report. *Obstetric Medicine: The Medicine of Pregnancy*, first published on 17 August 2014.

I thank Snow et al. for their case report on the management of severe peripartum hyponatraemia.¹ Severe hyponatraemia has been described in the peripartum period with preeclampsia, ingestion or infusion of excess fluids during delivery, prolonged infusion of oxytocin and glucocorticoid deficiency due to Sheehan's syndrome. The authors attributed severe hyponatraemia in the subject presented to syndrome of inappropriate antidiuretic hormone secretion (SIADH). The diagnosis of SIADH requires normal adrenal, thyroid and renal function. As stated by the authors, the panel of hormonal tests in the subject described are strongly suggestive of hypopituitarism with a low free thyroxine, low gonadotropins and an inappropriately low serum prolactin for the peripartum period in a mother attempting to lactate. The serum cortisol was not provided. Glucocorticoid deficiency may result in an inability to excrete dilute urine due to a combination of elevated levels of arginine vasopressin and increased water permeability in the collecting tubules.²

I do not agree with the authors' statement that the subjects' presentation was too acute to have been caused by secondary or tertiary adrenal insufficiency. The onset of severe hyponatraemia within days of delivery has been previously reported with glucocorticoid deficiency due to Sheehan's syndrome.^{3,4} In these cases, hyponatraemia was

unresponsive to fluid restriction and hypertonic saline; however, it rapidly resolved with glucocorticoid treatment.

Glucocorticoid deficiency may be life-threatening due to hypotension, hypoglycaemia and hyponatraemia. Urgent measurement of serum cortisol should be performed in any woman with significant hyponatraemia in the postpartum period to exclude hypothalamic–pituitary–adrenal axis insufficiency. This should not be restricted to subjects with peripartum hypotension as lymphocytic hypophysitis may also present with secondary or tertiary adrenal insufficiency.

Declarations

None

References

1. Snow TAC, Lim J, Laing CM, et al. Managing severe peripartum hyponatraemia: a case report. *Obst Med* 2014; 7: 171–173.
2. Milionis HJ, Liamis GL and Elisaf MS. The hyponatremic patient: a systematic approach to laboratory diagnosis. *CMAJ* 2002; 166: 1056–1062.
3. Bunch TJ, Dunn WF, Basu A, et al. Hyponatremia and hypoglycemia in acute Sheehan's syndrome. *Gynecol Endocrinol* 2002; 16: 419–423.
4. Lust K, McIntyre HD and Morton A. Sheehan's syndrome – acute presentation with hyponatraemia and headache. *Aust N Z J Obstet Gynaecol* 2001; 41: 348–351.

Adam Morton

Mater Health Services, Raymond Tce, Brisbane, Australia

*Adam Morton, Mater Health Services,
Raymond Tce, Brisbane QLD 4101, Australia.*

Email: Adam.morton@mater.org.au