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HYPONATREMIA – A RARE PRESENTATION OF SHEEHAN'S SYNDROME

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ABSTRACT

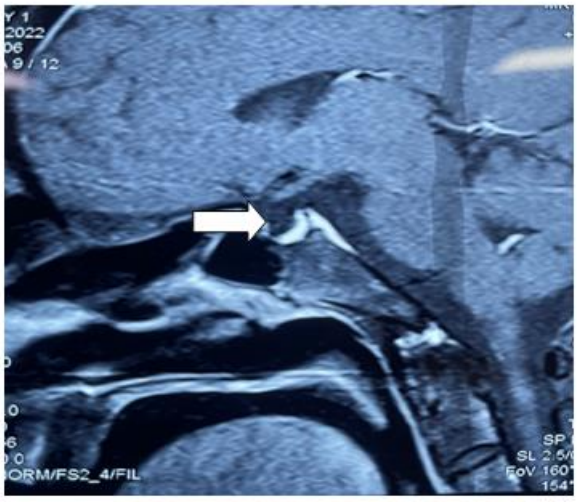
We present a case of 45 years old female, who presented with altered sensorium because of hyponatremia. Sheehan's syndrome was the reason for hyponatremia and it is a rare manifestation of this entity. To highlight the hyponatremia a rare presentation of Sheehan's syndrome is the reason for reporting.

KEYWORDS: Hyponatremia, post partum haemorrhage, Sheehan's syndrome.

INTRODUCTION

Sheehan's syndrome is a rare entity, but commonest cause of hypopituitarism in developing countries. Nonspecific symptoms may lead to delay in diagnosis and treatment. Clinical features depend on severity of pituitary insufficiency. It may present abruptly or slowly after delivery and post-partum blood loss. We present a case of Sheehan's syndrome who presented in altered sensorium due to hyponatremia, precipitated by gastroenteritis. Hyponatremia is a rare presentation of Sheehan's syndrome

Case: A 45 years female presented with altered sensorium for 1 day. There was preceding history of loose motion, vomiting, generalised weakness for 5 days and one episode of seizure. On examination in emergency department, she was drowsy and not oriented, moving all four limbs. Vitals- pulse 110/min., BP 70 mmHg (Systolic blood pressure) and RR-16/min. We kept the possibility of post gastroenteritis dyselectrolemia. Intravenous fluids were started and investigations were sent. Lab results were suggestive of Hb-12 gm%, TLC-6000/cmm, Platelets-95000, BUN-23, S.Creatine.-1.6, S. Na-113 mmol/L, S. K-4.5, S.Cl-84. She was having severe hyponatremia and was managed with 3% saline and subsequently she improved. History reviewed, she was hypothyroid for last 8 years and on thyroxine. She received multiple blood transfusions during last child birth. She could not breast feed her last child due to lactation failure. There was no menstrual failure. She used to visit many peripheral health institutions for generalised weakness on and off and used to improve by IV fluids. In view of Hypothyroidism, Lactation failure and generalised weakness, we kept the possibility of Sheehan's syndrome. Hormonal profile was sent and which revealed, TSH-1.01u1U/ml, ACTH-13.09, Cortisol-3ug/dl, FSH-13.01 u/ml, LH-6.66 micro/ml and Prolactin-1.54 ng/ml (3-26). These hormonal studies were suggestive of Sheehan's Syndrome. MRI brain focussing pituitary fossa was done, which revealed atrophic pituitary gland with empty sella (picture.1).



Picutre 1: Saggital section suggestive of empty sella(White arrow) showing absence of pituitary in sella turcica

Based on clinical profile, hormonal and imaging studies, diagnosis of Sheehan's Syndrome is established. As she was already on thyroxine, hydrocortisone was started 10 mg morning and 5 mg evening time. She was advised to increase the dose of hydrocortisone at time of stress.

DISCUSSION

The Sheehan's syndrome is pan hypopituitarism secondary to post pituitary gland necrosis after postpartum haemorrhage. The onset of sign and symptoms are variable, so diagnosis is delayed and some times missed. The latent period may be months to years after inciting event for diagnosis. It is characterised by anterior pituitary gland dysfunction and post pituitary gland dysfunction is rare. Inability to breast feed the baby and failure of resumption of menses are the diagnostic features of acute presentation. The development of hypothyroidism and secondary adrenal insufficiency are late manifestation of Sheehan's syndrome. Severe hyponatremia as presenting manifestation of Sheehan's syndrome is rare in literature. This is may be because of slowly evolving in to chronic form.[1] Our presenting case, presented with severe hyponatremia, though precipitated by gastroenteritis. The cause of hyponatremia in Sheehan's syndrome is still debatable. Punwell and colleagues reported mild to severe hyponatremia in 9 of 13 cases with Sheehan's syndrome.[2] The mechanism of hyponatremia in Sheehan's syndrome is multifactorial: a) Increased secretion of vasopressin because of glucocorticoid deficiency b) Urinary loss of sodium caused by aldosterone deficiency c) Impaired water excretion because of thyroid hormone deficiency d) Impaired water excretion caused by vasopressin.[3] Aderenal insufficiency is one of the most likely cause of hyponatremia in SS.[4] Our case had also adrenal insufficiency, as she was having hypotension and hyponatremia. Sheehan's syndrome is almost extinct in developed countries because of improved obstetrical care and in developing countries; it is mostly seen in home conducted deliveries due to postpartum haemorrhage. Diagnosis is established by hormonal studies and MRI brain showing empty Sella. Management is by hydrocortisone and thyroid hormone replacement.

CONCLUSION

Sheehan syndrome is rare entity, because of variable and delayed presentation, Sometimes diagnosis may be missed. Lactation failure and failure of resumption of menses are clue to diagnosis. Hyponatremia is a rare presentation in Sheehan's syndrome but with high index of suspicion it can be helpful in diagnosis.

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