Research Paper Medical Science

# Late onset Sheehans presenting as recurrent hyponatremia - a case report


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**ABSTRACT**

A 47 year old female presented with history of hyponatremia and features of hypothyroidism. she had history of recurrent hyponatremia in the past . Obstetric history suggested that she had a postpartum hemorrhage which required blood transfusion 16 years back followed by failure of lactation and secondary amenorrhea . Investigations were suggestive of pan hypopituitarism and MRI showed an empty sella . She was treated with steroids and thyroxine replacement and is doing well at 6 months of follow up

**KEYWORDS** Sheehans syndrome , hyponatremia , empty sella , hypothyroidism

A 47 year old female presented to our hospital with history of recurrent vomiting since 5 days . There was no history of fever , abdominal pain or loose tools. She consulted a local doctor who gave antiemetic tablets. As the vomiting was not decreasing she returned back to the local hospital after 3 days and was admitted there .She was detected to have hyponatremia and correction was tried with hypertonic saline . But hyponatremia was not getting corrected . Her drowsiness increased 2 days after admission and devoloped seizures, hence referred to our hospital.

Patient had past history of recurrent vomiting and drowsiness and an episode of seizure 4 years back for which she was evaluated and found to have hyponatremia for which she was treated and recovered.

On taking the obstetric history , she had twin pregnancy 16 years back at a foreign country , one baby died immediately after delivery. There was significant post partum hemorrhage for which she was given multiple blood transfusions . There was failure of lactation and secondary amenorrhea since then.

On examination patient was drowsy , vital signs were normal , she was obese , with facial puffiness and hoarseness of voice . She had diminished deep tendon reflexes.There was no thyroid swelling.

Evaluation showed mild anemia Hb -10.4 g%,S. Na of 115 meq / litre , S.K+ -3.4 meq/L

S.Cholesterol -305 ,S Triglycerides – 165 mg%,HDL – 41 mg%, LDL-199 mg%

S TSH - 1.023 IU/ml, F T3- 0.641 pg/ml ,F T4-0.222 ng/dl .

S. Cortisol (8 am) – 16.2mcg/dl "(Normal 5-25)" . Patient was treated with steroids at local hospital before referral .

Prolactin – 1.24 ng/ml (4.79 – 23.3) ,FSH – 5.30 mIU/ml (23.0 – 116.3)

LH– 1.63 mIU/ml (15.9 – 54.0).MRI was suggestive of a thin, nearly inapparent pituitary gland along the sellar floor, sella filled with CSF – S/o Empty sella .

Patient was treated with Thyroxine 100 microgram/day , Steroids were given as Inj Hydrocortisone 100 mg iv 8 hrly for 2 days , 12 hrly for 2 days and OD for 2 days and was planned to shift to oral steroids .

Her sensorium became normal and vomiting stopped by 2 nd day.

Her sodium level became normal by 5 th day of admission .

She started to show signs of disorientation by 5 th day which increased by next day.Her metabolic parameters were checked which was within normal limits. Steroid psychosis was suspected and steroids were withdrawn . Sensorium gradually cleared over a period of 2 days

She was discharged on thyroxin supplements and on small dose of oral steroids and is on regular follow up now

**Discussion**

Sheehans syndrome is a cause of panhypopitutarism due to ischemic damage following peripartum hypotension.This is because the pituitary lactotrophs hypertrophy in the peripartum period and makes it more susceptible for infarction in case of

hypotension.

Many times the symptoms are nonspecific and slowly evolving causing a delayed diagnosis . A high index of suspicion for pituitary cause should be there in the background of secondary amenorrhea and failure of lactation .Hyponatremia in sheehans can be due to many causes.

Hypothyroidism can cause decreased free-water clearance and subsequent hyponatremia.Glucocorticoid deficiency can also cause decreased free-water clearance independent of vasopressin.Hypopituitarism itself can stimulate vasopressin secretion and can cause severe inappropriate secretion of antidiuretic hormone, which can also cause hyponatremia.It is difficult to correct hyponatremia without giving steroids .

The potassium level in these situations is normal, because adrenal production of aldosterone is not dependent on the pituitary

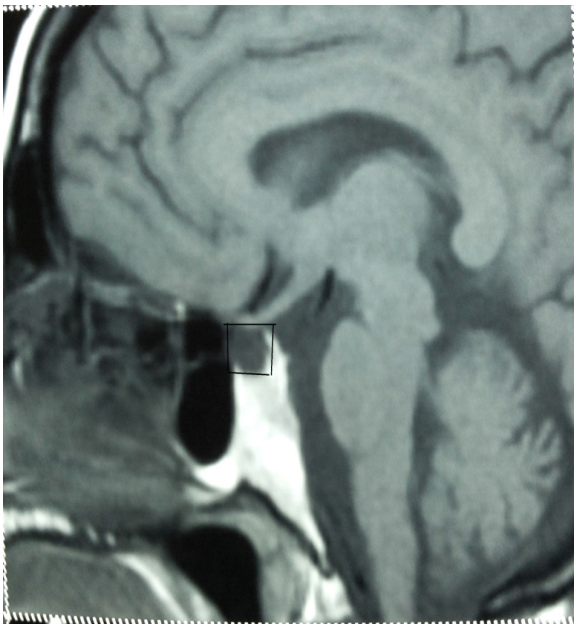
Steroids ae given for the associated adrenal insufficiency and has to be given before thyroxin supplementation.

Thyroid fuction test of the patient showed normal S TSH and low F T3 and F T4.

In sheehans syndrome S TSH can be normal or even be mildly elevated .This high level of TSH is due to increased sialylation (a form of glycosylation) which reduces its metabolic clearance leading to increased half-life.However, this glycosylated TSH has reduced biological activity as shown by TSH bioassay

The standard dose of hydrocortisone replacement omit one "is" 20 mg/d for an adult (15 mg every morning and 5 mg every evening). In crisis much higher dose is given .

Steroid psychosis has been reported even with very low doses with steroid . Withdrawal of steroids and restarting at lower-dose and titration according to the clinical response is needed.



MRI showing a thin, nearly inapparent pituitary gland along the sellar floor, sella filled with CSF – S/o Empty sella

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