ISSN 2091-2889 (Online)
ISSN 2091-2412 (Print)

Journal of Chitwan Medical College 2013; 3(4): 49-50
Available online at: www.jcmc.cmc.edu.np

CASE REPORT

A CASE REPORT ON SHEEHAN'S SYNDROME

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ABSTRACT

Sheehan's syndrome is a well-known cause of panhypopituitarism secondary to pituitary apoplexy, that generally occurs after an intra- or postpartum bleeding episode characterized by massive hemorrhage and hypovolemic shock. The diagnosis can be difficult and is often formulated after some years from the syndrome occurrence. We report the case of a woman with a relatively early diagnosed Sheehan's syndrome associated with amenorrhoea and secondary hypothyriodism complicated by postpartum hemorrhage.

Key Words: *Sheehan's syndrome, Panhypopituitarism, Amenorrhoea & Secondary hypothyroidism.*

INTRODUCTION

Sheehan's syndrome, or necrosis of the pituitary gland, is a rare complication of postpartum hemorrhage initially described in 1937. [1] The pituitary gland is physiologically enlarged in pregnancy and is therefore very sensitive to the decreased blood flow caused by massive hemorrhage and hypovolemic shock. Women with Sheehan syndrome have varying degrees of hypopituitarism, ranging from panhypopituitarism to only selective pituitary deficiencies. [2,4] The anterior pituitary is more susceptible to damage than the posterior pituitary. Failure to lactate or difficulties with lactation are common initial symptoms of Sheehan syndrome. [5] Many women also report amenorrhea or oligomenorrhea after delivery. In some cases, the diagnosis is not made until years later, when features of hypopituitarism, such as secondary hypothyroidism or secondary adrenal insufficiency, become evident in a woman who had a postpartum hemorrhage. Secondary hypothyroidism is clinically indistinguishable from primary hypothyroidism, but patients with hypothyroidism caused by hypopituitarism have low T3 and T4 levels with normal or even inappropriately low TSH levels. Diagnosis of panhypopituitarism is straightforward, but partial deficiencies are often difficult to elicit. [6] A woman with panhypopituitarism will have low levels of pituitary hormones (luteinizing hormone, corticotropin, and thyrotropin) as well as the target hormones (cortisol and thyroxine). The MRI study of the pituitary gland may reveal different features depending on the stage of the disease. While early scans demonstrate a non-hemorrhagic enlargement of the pituitary gland leading to its subsequent involution, late scans typically show an empty sella. A secondary empty sella is considered a characteristic finding in the classical form of Sheehan's syndrome. [7]

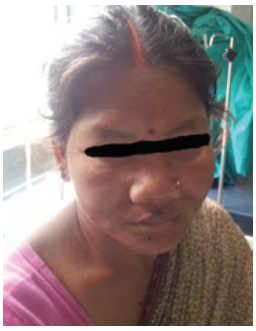
Case Presentation:

A 38 years old female from Bihar india with significant history of IUFD with massive PV bleeding 5 years back came to our OPD with a chief complaint of amenorrhoea, Facial puffiness, B/L leg swelling for 5 years, and shortness of breath for 4 years. She was apparently all right 5 years ago when she had massive PV bleeding 5 years back and than she began to develop facial puffiness which was insidious in onset. She also developed swelling of B/L legs, fullness of supraclavicular fossa and neck fullness but there was no abdominal distension. She admits to have mayalgia, lethargy, tiredness after doing household works and feels excessively sleepiness. She also admits that she feels excessively cold. She also started to develop SOB while performing household activities since last 4 years. Her SOB wasnot associated with cough, chest pain, fever, hemoptysis, dizziness. She had no history of palpitation, syncope, cyanosis. The breathlessness was non progressive, non seasonal but only exertional. However there is no chest pain, no postural variation of SOB, no cough, no yellowish discolouration of sclera. She doesnot complaint of severe headache, visual disturbance, no galactorhoea. Her bowel and bladder habit are normal. Her appetite is normal and complaints of weight gain of around 10kg since last 5 years.

Menstrual History:

Menarche at 15 years, regular cycle of 30+2 days with flow for 5-6days cycle, P6L5A0, 5 years back she admits that she had IUFD with massive P/V bleeding but was not associated with loss of consciousness. Then after her menstruation had ceased and is not present uptill now. She has no history of TB, HTN, DM(no significant surgical history), no significant family history, no history of use of any drug for long time. O/E:Pulse:60bpm, RR:16 breaths per minute, BP: 80/50mm of Hg on left hand,

Weight: 67kg,Pallor was present, she had dry and lusterless skin with fine eye brows and loss of eyebrows more prominent in lateral side, sparse axillary and pubic hair was present, bilateral non pitting oedema was present. Her thyroid examination was normal.
Colonoscopy: Normalcolonoscopy;
24 hour urine: 2.5litre;



Urineosmolarity: 408.5mosmol;
Urine specific gravity:1.030;
USG abdomen: GB polyp;
Thyroid function test:
FT3: 0.95 pg/ml(1.4-4.2); FT4: 0.51ng/dl(0.8-2.0); TSH: 3.71 IU/ml(0.39-6.16)
Serum prolactin Level(CLIA): 1.3ng/ml Female normal range:1.2-19.2
SerumLH(CLIA): 0.1mIU/ml(↓↓)
Women follicular phase: 0.8-10.5; Mid-Cycle:18.4-61.3; Lutealphase:0.8-10.5
Post Menopausal: 8.2-40.8
SerumFSH(CLIA): 0.99mIU/ml(↓↓)
Womenfollicularphase:3.0-12.0
Mid-Cycle:8.0-22.0
Lutealphase:2.0-12.0
Post Menopausal: 35.0-151.0
MRI Head: There is empty sella with CSF occupying the pituitary fossa.

INVESTIGATION
CBC: Hb:8.4gm/dl ,PCV:25.84 ;WBC:5,900 , Neu:57% ,Lym:37% ,PlateletsCount:1,40,000;
UrineR/E: Normal; Random Bloodsugar:97mg/dl,
LFT: Normal, Na:146.4mmol/l, K:3.79mmol/L, Urea:21.81mg/dl, Creatinine:1.43mg/dl.
ECHO: Normal,
Endoscopy: Antralgastritis;

DISCUSSION

This is a case of middle aged women who had a history of significant P/V bleeding 5years back presented to us with chief complaint of amenorrhoea, Facial puffiness, B/L leg swelling for 5years, and shortness of breath for 4 years. She also gives significant history of mayalgia, lethargy, tiredness, excessively sleepiness & cold intolerance. Examination showed that she had typical hypothyroid facies and skin changes. Investigation report showed that her TSH level was normal and free T4 level was decreased which signify secondary hypothyroidism so we did serum LH, FSH level and they were also decreased. She has no significant history of severe headache, visual disturbance, galactorhoea and we also did serum prolactin level to rule out prolactinoma as it is one of the most common type of pituitary tumour and can also present with features of Panhypopituitarism due to its pressure effect and it came as normal. We did Endoscopy and colonscopy to rule out any GI cause of her Anemia and it came normal. Gokalp et al. have recently reported hematological abnormalities in 65 patients with Sheehan's syndrome, 80% of whom presented with anemia, compared with 25% of controls[8] . Many hormonal deficiencies, such as hypothyroidism, adrenal insufficiency and gonadal hormonal deficiency, can explain normochromic anemia in hypopituitarism [9] . On the other hand, it can be the result of a physiologic adjustment to lower oxygen requirement, as pituitary hormones modulate the production of erythropoietin in the kidney[10] . Her MRI head showed empty sella syndrome which was compatible with Sheehan's syndrome[11-12] . As Diabetes Insipidus is often associated with Sheehan's syndrome so we did 24 hour urine collection and it was normal, urinary specific gravity was also normal, urine osmolarity was >300mosmol and there was no hypernatremia. We couldn't determine serum cortisol, ACTH and GH level in this patient due to cost factor as we already had enough evidence that she might have Pan hypopituitarism due to sheehan's syndrome. The final diagnosis on this case was based on typical history of hypothyroidism, investigative report showing secondary hypothyroidism, decreased serum LH, FSH, normal Prolactin levels and MRI brain showing empty sella .

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