

A CASE REPORT OF SHEEHAN'S SYNDROME

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ABSTRACT

Sheehan's syndrome is a rare condition with excessive blood loss during or after child birth which affect the function of the pituitary gland, this ample bleeding may reduce the blood flow to the pituitary gland causing the pituitary cells to be damaged or necrosed. Clinical interpretations such as normochromic anemia, pancytopenia, and electrolyte imbalances are mainly observed in these patients.

KEYWORDS: Sheehan's syndrome, Hypopituitarism, Post Partum Hemorrhage.

INTRODUCTION

Sheehan's syndrome is potentially causing a serious postpartum complication. It was described by Sheehan in 1937, and it develops as a result of ischemic necrosis of the pituitary gland, secondary to a brutal and extended shock due to obstetric hemorrhage.^[1] Symptoms include difficulty in breast feeding, irregular menstrual periods, weight gain, loss of pubic and under arm hair and fatigue. Clinical laboratory values interprets the hematological abnormalities that include anemia, pancytopenia and electrolyte imbalances include decreased sodium, potassium and bicarbonates are rarely observed in patients with Sheehan's syndrome.^[2,3]

CASE REPORT

A 40-year old female was admitted with the chief complaints of amenorrhoea, leg swelling, facial puffiness, lactational failure, loss of appetite. On physical examination, she represents pedal edema, doughy skin, and pallor with no pubic and axillary hair. Her past medical

history denotes that she is a k/c/o hypothyroidism for 9 years and complicated with PPH (post-partum hemorrhage) during her last child birth at the age of 25. Her past medication history highlights medication non adherence due to lack of awareness of the complication. On examination hypotension (100/70mmHg) was observed and her CVS, RS, and CNS was observed to be normal. On laboratory investigations shows decreased hemoglobin of 7.5g/dl with mean corpuscular volume at 86.0fl, mean corpuscular hemoglobin at 28.1pg and mean corpuscular hemoglobin value at 32.7g/dl and electrolyte imbalances such as hyponatremia (108mmol/L), hypokalemia (2.5mmol/L) and metabolic acidosis (18mmol/L). She also experience pancytopenia with WBC of $2.5 \times 10^9/L$, RBC of $2.84 \times 10^{12}/L$ and platelet count of $94 \times 10^9/L$. Her hemoglobin level was 8.0g/dl with mean corpuscular volume at 86. 0fl, mean corpuscular hemoglobin at 28.1pg and mean corpuscular hemoglobin value at 32.7g/dl. Hormone profile includes cortisol level was 1.7pg/dl and also having 1.3ng/dl of T3, 0.46pg/dl of T4. The diagnosis of Sheehan's syndrome was established with the her medical history, physical examination and pituitary magnetic resonance images demonstrated an empty sella. On the day of admission she was administered hormonal replacement therapy with Levothyroxine 150mcg/day orally, hydrocortisone injection 100mg/day and vitamin supplements also added to her therapy.

She was closely monitored for 12 days to analyse the prescribed therapy pattern and the chief complaints subsided and complete hematological recovery was noted. During discharge she was advised about the medication adherence.

DISCUSSION

Sheehan's syndrome is characterized by the varying degree of anterior pituitary dysfunction due to ischemic necrosis of pituitary gland after massive post partum haemorrhage (PPH) and severe low blood pressure during and after child birth. The diagnosis can be marked by the lactational failure, prolonged amenorrhea and hypoglycemic crisis. The mean duration between postpartum bleeding and subsequent development of symptoms varies between 1 to 33years. The main clinical features of the diseases will be consistent with thyroid and gonadotrophins deficiencies.^[3,4] The diagnosis of sheehan's syndrome is based on the features of hormone deficiencies, medical history of the patient, physical examination and decreased levels of basal hormones such as T3, T4, TSH, FSH, LH, estrogen, prolactin, cortisol and insulin like growth factors.^[4] The diagnosis also can include pancytopenia and electrolyte imbalances due to deficiency in anterior pituitary hormones. MRI or CT can be

used for the diagnosis, and often shows empty sella turtica. Treatment involves lifelong hormonal replacement therapy and it is essential to replace the hormones that the pituitary gland fails to produce. Levothyroxine can be given to boosts up the thyroid deficiencies.^[5]

CONCLUSION

Pancytopenia and electrolyte imbalances are the rare apperence of hormonal abnormalities, so the clinicians should consider all the possibilities of hypopituitarism as a cause of pancytopenia and indicate series of hormonal examinations. Multiple anterior pituitary deficiencies may lead to a reson of pancytopenia and electrolyte imbalances. A lifelong hormonal replacement therapy with thyroid and cortisol hormones results in complete recovery. Since pancytopenia can be a treatable etiology of Sheehan's syndrome, hematologist should be more aware. Post partum hemorrhage is also a complication, by managing this PPH we can excluded the complications.

REFERENCES

1. Sheehan HL. Post-partum necrosis of the anterior pituitary. *Journal of Pathology and Bacteriology.*, 1937; 45: 189-214.
2. Jialal I, Naidoo C, Norman RJ, Rajput MC, Omar MA, Joubert SM. Pituitary function in sheehan's syndrome. *Obstet Gynecol.*, 1984; 63: 15–9.
3. Anfuso S, Patrelli TS, Soncini E, Chiodera P, Fadda GM, Nardelli GB. A case report of Sheehan's syndrome with acute onset, hyponatremia and severe anemia. *Acta Biomed.*, 2009; 80: 73–76.
4. Huang YY, Ting MK, Hsu BR, Tsai JS: Demonstration of reserved anterior pituitary function among patients with amenorrhea after postpartum hemorrhage. *Gynecol Endocrinol.*, 2000; 14(2): 99-104.
5. Akoz AG, Atmaca H, Ustundag Y, Ozdamar SO: An unusual case of pancytopenia associated with Sheehan's syndrome. *Ann Hematol.*, 2007; 86(4): 307-308.