



## A LONG MISDIAGNOSED CASE OF SHEEHAN SYNDROME

## Medical Science

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## KEYWORDS

## INTRODUCTION

Sheehan syndrome is a form of maternal hypopituitarism which is caused due to excessive haemorrhage during or after delivery of a baby that may affect the function of the pituitary gland. 1,2,3 Such extensive bleeding may reduce the blood flow to the pituitary gland causing ischemia of the pituitary gland leading to infarction or necrosis. 3,4 It has been estimated that Sheehan syndrome may occur in five out of every 100,000 women who give birth. Its incidence is lesser in developed countries as compared to developing countries. 4,5,6 Sheehan syndrome is rare and is often a missed out diagnosis. Here we report our experience with a case of Sheehan syndrome.

## Case Report

43 year old female, married since 20 years came to MGM Medical College and Hospital, Aurangabad with complaints of Loose stools (8-9 episodes) watery in consistency since 2 days and Vomiting (6 episodes) contents being food since 2 days. Patient was not a known case of any major disorder. On further enquiry, patient's relatives also complained of slowness of speech and movements which has progressively increased over last 12-15 years. Patient has history of amenorrhea since 15 years since the last pregnancy for which no specific treatment was taken. Patient had history of Post Partum haemorrhage in the previous pregnancy in 2007 for which she had been hospitalized in ICU for 1 week haemorrhage with lactation failure and her menses had not resumed since then. On examination, the patient was vitally stable. Patient had dry scaly skin. There was loss of axillary and pubic hair with thinning of scalp hair. Patient also had hypogonadism. On examination of her Nervous system, patient was conscious, oriented to time, place, person with speech being slow with normal word output. Tone in all four limbs was normal with power in all four limbs being 5/5. Upper limb and lower limb reflexes were present bilaterally. But the time needed for relaxation was prolonged with bilateral plantar reflexes showed flexor response. Rest of the systemic examination was within normal limits. Patient was primarily diagnosed with Acute Gastroenteritis and was treated for the same with IV fluids and IV antibiotics. Patient was symptomatically better in 2-3 days. Patient was then evaluated further for the slow speech, dry skin, sparse pubic and axillary hair, amenorrhea with the help of laboratory investigations as well as Imaging. The patient had low levels of Serum Cortisol, Serum Prolactin, Thyroid Stimulating Hormone was on lower limit with Free T3 and T4 low which all pointed towards pituitary hypofunction. Patient's reports done in 2017 were suggestive of a low Serum Follicle Stimulating Hormone level and low Serum Leutinising Hormone level along with Ultrasound of abdomen and pelvis suggestive of shrunken Uterus and Ovaries. The complaints all started with previous pregnancy. An MRI of Brain with pituitary was done suspecting a central cause of the above findings which was suggestive of empty sella secondary to pituitary atrophy. A diagnosis of Sheehan Syndrome was then made and was started on Tapering doses of Oral steroids (Tab Prednisolone 60mg OD). Patient was also started on Oral Thyroxine supplement 50ug OD (BBF). Patient was asked to follow-up after 15 days and showed symptomatic improvement.

## DISCUSSION

Sheehan syndrome is also known as Postpartum hypopituitarism, Postpartum panhypopituitarism, Postpartum panhypopituitary

syndrome, Postpartum pituitary necrosis. Excessive blood loss during or after delivery of a baby may affect the function of the pituitary gland, leading to a form of maternal hypopituitarism known as Sheehan syndrome (SS). (1,2) Such extensive bleeding may reduce the blood flow to the pituitary gland causing the pituitary cells to be damaged or die (necrosis). The production of the usual pituitary hormones will be reduced, perhaps by a significant amount. It has been estimated that Sheehan syndrome may occur in five out of every 100,000 women who give birth. (3) It is rare in developed countries, but may occur more often in developing countries. During pregnancy the pituitary gland will enlarge and may double in size. At this time the gland is especially vulnerable to a severe drop in blood pressure (sometimes called "shock") and excessive maternal bleeding may induce the "shock" and the damage to the cells of the gland. (1,3) At that time the amount of hormones produced by the pituitary may be decreased giving rise to the symptoms associated with hypopituitarism. Recently, anti-hypothalamic antibodies and anti-pituitary antibodies in the serum of patients diagnosed with Sheehan's syndrome (40% and 35%, resp.) However their role is still controversial. Treatment is important not only to correct endocrine abnormalities, but also to reduce mortality due to hypopituitarism. [1] In patients who have both secondary hypothyroidism and hypocortisolism, glucocorticoids should be replaced before the replacement of thyroid hormone. Gonadotropin deficiency and hypogonadism should be treated with a hormone replacement therapy. (1, 2) Patients who wish to become pregnant may be directed to the service of fertility for ovulation induction followed by successful pregnancy. For patients with diabetes insipidus, treatment of choice is 1-desamino-8-d-arginine vasopressin or desmopressin (DDAVP). (3,4) Replacement of GH should be considered in patients with GH deficiency. Dosage of GH needs to be individualized. GH should be started on a low-dose regimen (0.1–0.3 mg/d) and titrated upward by 0.1 mg/d per month with careful monitoring, so as to maintain insulin-like growth factor-1 levels within the age-appropriate range for the patient. (5,6) These patients may benefit from GH replacement, especially with regard to cardiovascular risk and body composition. (6)

## Summary

Sheehan Syndrome is a frequent cause of hypopituitarism in underdeveloped countries. The clinical features of hypopituitarism are often subtle and years may pass before the diagnosis is made following the inciting delivery. History of postpartum haemorrhage, failure to lactate and cessation of menses are important clues to the diagnosis. Early diagnosis and appropriate treatment are necessary to reduce the morbidity and mortality of patients.

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