

**CASE REPORT**

# Spontaneous Pregnancy in a Patient with Sheehan's Syndrome

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**Abstract**

Spontaneous pregnancy in patients with Sheehan's syndrome is very rare, even after ovulation induction in such patients' pregnancy outcome is poor. We report a case of women with Sheehan's syndrome who became pregnant without ovulation induction with successful outcome of pregnancy.

**Key Words**

Sheehan's syndrome, Spontaneous pregnancy

**Introduction**

Sheehan's syndrome is described as postpartum hypopituitarism due to pituitary necrosis caused by severe hypotension or shock secondary to massive bleeding during or just after delivery (1). The criteria for the diagnosis of Sheehan's syndrome are as follows: i) typical obstetric history of severe postpartum vaginal bleeding; ii) severe hypotension or shock for which blood transfusion or fluid replacement is necessary; iii) failure of postpartum lactation; iv) failure to resume regular menses after delivery; v) varying degrees of anterior pituitary failure and partial or panhypopituitarism; vi) empty sella on CT scan or MRI (2). Spontaneous pregnancy occurring in patients with Sheehan's syndrome is very rare (3). Even after ovulation induction outcome in terms of pregnancy rate and achievement of live birth is disappointingly poor with a live birth rate of only 42% (4). Here, we report a case of women with Sheehan's syndrome who became pregnant without ovulation induction with successful outcome of pregnancy.

**Case Report**

37 years old woman (P 1 L 1) presented with chief complain of inability to conceive since last 10 years. She had full term vaginal delivery of 3.5 kg female child 11 years back, Delivery was followed by Post Partum Hemorrhage for which she was transfused with 4 units

of blood; subsequently she had failure of lactation. Patient had history of fatigue, weight loss, loss of axillary hair, Oligomenorrhoea (1day/45-60days) since last 10 years, followed by amenorrhoea for last 2 years. On examination, patient was of thin build with Body Mass Index (BMI) of 17 Kg/cm<sup>2</sup>; pulse was regular with rate of 86/min, supine blood pressure 90/52 mm Hg with sparse pubic and axillary hairs and normal adult type external genitalia. Per speculum and per vaginum examination detected no abnormality.

Investigations revealed Hb 9.5 mg/dl, Blood sugar (random) 50 mg/dl. Hormonal profile revealed low levels of T3, T4, TSH, Cortisol and ACTH (*Table 1*) and MRI of brain demonstrated Empty sella tursica (*Fig-1*). On the basis of history, examination and investigations final diagnosis of Sheehan's syndrome was made and Patient was put on Tab. Prednisolone 10 mg/day along with Tab. Eltroxin 100µg/day. Following this treatment patient resumed her menstruation and conceived within 4 months of starting the therapy. She had a uneventful antenatal period with normal blood sugar and thyroid values. There were no maternal complications like Gestational Diabetes Mellitus, Preeclampsia. Fetal growth was normal without any evidence of IUGR and dysmorphism. Level II ultrasound scan was normal. Patient continued with

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**Table 1. Hormones of Patients**

Hormone	Patients value	Normal value
T3 (ng/dl)	23	77-135
T4 (µg/dl)	2.8	5.4-11.7
TSH (µIU/ml)	0.2	0.34-4.25
FSH (mIU/ml) <sup>b</sup>	20	3-20
LH (mIU/ml) <sup>b</sup>	15	2-15
Cortisol <sup>c</sup> (µg/24h)	05	20-70
ACTH (pg/ml)	03	6-76
GH (ng/ml)	05	.5-17
Prolactin (ng/ml)	10	0-20

medication throughout pregnancy. She delivered a full term healthy male baby weighing 3 kg at 38 weeks of pregnancy through cesarean section (elective), postoperative period was uneventful but patient failed to lactate. Postnatally she is continuing with Tab. Eltroxin and Prednisolone.

### Discussion

Sheehan's syndrome is the most common cause of hypopituitarism in underdeveloped or developing countries. Its exact pathogenesis is not known. However, increased pituitary size during pregnancy can make the pituitary susceptible against ischemia because of compression of the superior hypophysial arteries (5). Patients may have variable presentations but Failure of postpartum lactation and failure to recommence menstruation after delivery are common symptoms in most patients. The mean duration between postpartum hemorrhage and the subsequent clinical manifestations vary from 1 to 33 years (6). Partial or total empty sella is a characteristic finding of Sheehan's syndrome (7). Although there is often a functional reserve of gonadotropins, patients with Sheehan's syndrome rarely menstruate spontaneously with rare spontaneous pregnancy (8,9), but pregnancy may be possible in patients with preserved secretion of Gonadotropins.

We report a case of patient with Sheehan's syndrome and preserved gonadal function who became pregnant spontaneously. The purpose of our report is to describe such a rare case with spontaneous pregnancy. Since the signs and symptoms of hypopituitarism are non



**Fig 1. Empty Sella Turcica**

specific the diagnosis of Sheehan's syndrome should be considered in all patients with a history of hemorrhage during pregnancy or delivery. Patients with preserved gonadal function should be advised of the possibility of becoming pregnant. It is also crucial to have an early diagnosis and initiation of appropriate therapy whenever pregnancy occurs in hypopituitarism.

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