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Sheehans Syndrome with Pancytopenia- An Unusual Association

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ABSTRACT: *Sheehan's syndrome is defined by anterior pituitary hormone deficiency due to post-partum ischemic necrosis of the pituitary gland after massive blood loss. We describe a case of 45 year old woman who presented with recurrent hypoglycemia for ten years following history of postpartum hemorrhage. Laboratory test revealed features of hypopituitarism and pancytopenia.Pancytopenia has been rarely associated. Treatment by hormone replacement corrected her hypoglycemia and pancytopenia.*
KEY WORDS: *Sheehans syndrome,hypopituitarism,pancytopenia,postpartum haemorrhage*

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I. Introduction

Sheehan's syndrome is defined by anterior pituitary hormone deficiency due to post-partum ischemic necrosis of the pituitary gland after massive blood loss. Hypoglycemia due to growth hormone, thyroid,adrenal and other counter regulatory hormone deficiency is known. The most frequent hematologic finding is anemia. Pancytopenia is rarely seen in patients with Sheehan syndrome. Only eight cases have been reported upto now.

II. Case History

We present a case of 45 yrs old female patient presented to the emergency department in an unconscious state. She was cold diaphoretic , her RBS was 53 mg/dl .She had history of similar frequent episodes of hypoglycemia since past 10 years . On physical examination she was pale ,had a pulse rate of 60/min,BP of 90 mm hg systolic. On investigation she had inappropriately low normal TSH and FT3 FT4 were decreased suggestive of secondary (central) hypothyroidism. A detailed interview revealed history of post partum hemorrhage during her last pregnancy she required to be transfused with five blood units. The patient had amenorrhea since her last pregnancy. Taking into consideration all of these hypopituitarism was thought of; pituitary hormone studies were compatible with pituitary insufficiency (table 1). Her haemogram showed pancytopenia. The diagnosis of Sheehan's syndrome was further supported by the MRI brain demonstrated an empty sella .Patient was discharged on Levothyroxine and prednisolone, along with bisphosphonates , calcium and vitamin D and on follow up there was complete recovery of pancytopenia. Hormone therapy for reproductive function was considered and decided against taking into account of her age and personal opinion.

III. Discussion

Hypoglycemia as a presenting feature for hypopituitarism is more often seen in the setting of pituitary apoplexy than Sheehan's. We present a patient who had history of recurrent admissions for hypoglycemia, sometimes life threatening requiring intravenous glucose. Although it was accompanied by secondary amenorrhea but patient did not present for this. The obstetric history in the past and clear signs of hypothyroidism on examination led us to the diagnosis.

Many hormonal deficiencies, such as hypothyroidism adrenal insufficiency and gonadal hormone deficiency can explain normochromic anemia in hypopituitarism. As pituitary hormones modulate the production of erythropoietin it can be the result of a physiologic adjustment to lower oxygen in the kidney .This is supported by the low erythropoietin levels found in these patients.However within the framework of hematologic disorder,pancytopenia is rarely observed and is best explained as a consequence of loss of effect of pituitary hormones on metabolic reactions to hematopoiesis,which is related to hypopituitarism. As shown previously the patients hematological profile improved with corticosteroid and thyroxin replacement.Only few cases have been reported so far.

TEST	8/11/14	12/12/14
Hb	8.1 gm/dl	10.5 gm/dl
TC	2800 cell/mm3	11,300 cell/mm3
DC	62/33/5	62/65/2/1
Platelet count	54000	2 lakh

TEST	VALUE	NORMAL RANGE
TSH	0.35McIU/ml	0.5-5.5
FT4	<0.40 ng/dl	0.89-1.76
FT3	1.41 pg/ml	2.3-4.2
S.Cortisol	3.47 mcg/dl	16.5-26
FSH	1.17mIU/ml	21.7-153
LH	0.012 IU/l	1-20
S.ACTH	14.48 Pg/ml	9-52

Test	Result	Reference range
TSH (McIU/ml)	0.35	0.5 - 5.5
FT 4 (ng/dl)	<0.4	0.89 – 1.76
FT 3 (pg/ml)	1.41	2.3 – 4.2
S. Oestradiol (pg/ml)	12.77	<22 (post menopausal)
FSH (mIU/mL)	1.17	21.7 – 153
IGF-1 (ng/ml)	< 25	101 – 267
S. Cortisol (Mcg/Dl)	3.47	6.5- 26
ACTH (pg/ml)	14.8	10 - 46

References

[1]. 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.
[2]. Acta Biomed 2009, 80(1):73-76. PubMed Abstract
[3]. Huang YY, Ting MK, Hsu BR, Tsai JS: Demonstration of reserved anterior pituitary function among patients with amenorrhea after postpartum hemorrhage.
[4]. Gynecol Endocrinol 2000, 14(2):99-104. PubMed Abstract | Publisher Full Text
[5]. Gokalp D, Tuzcu A, Bahceci M, Arikan S, Bahceci S, Pasa S: Sheehan's syndrome as a rare cause of anemia secondary to hypopituitarism.
[6]. Ann Hematol 2009, 88(5):405-410. PubMed Abstract | Publisher Full Text
[7]. Kim DY, Kim JH, Park YJ, Jung KH, Chung HS, Shin S, Yun SS, Park S, Kim BK: Case of complete recovery of pancytopenia after treatment of hypopituitarism.
[8]. Ann Hematol 2004, 83(5):309-312. PubMed Abstract | Publisher Full Text
[9]. Laway BA, Bhat JR, Mir SA, Khan RS, Lone MI, Zargar AH: Sheehan's syndrome with pancytopenia--complete recovery after hormone replacement (case series with review).
[10]. Ann Hematol 2010, 89(3):305-308. PubMed Abstract | Publisher Full Text
[11]. Ferrari E, Ascari E, Bossolo PA, Barosi G: Sheehan's syndrome with complete bone marrow aplasia: long-term results of substitution therapy with hormones.
[12]. Br J Haematol 1976, 33(4):575-582. PubMed Abstract | Publisher Full Text
[13]. Ozdogan M, Yazicioglu G, Karadogan I, Cevikol C, Karayalcin U, Undar L: Sheehan's syndrome associated with pancytopenia due to marrow aplasia: full recovery with hormone replacement therapy.
[14]. Int J Clin Pract 2004, 58(5):533-535. PubMed Abstract | Publisher Full Text
[15]. Akoz AG, Atmaca H, Ustundag Y, Ozdamar SO: An unusual case of pancytopenia associated with Sheehan's syndrome.
[16]. Ann Hematol 2007, 86(4):307-308. PubMed Abstract | Publisher Full Text
[17]. Tessnow AH, Wilson JD. The Changing Face of Sheehan's Syndrome. The Am J Med Sci. 2010;340: 402-406.
[18]. Patrelli TS, Soncini E, Chiodera P, Fadda GM, Nardelli GB. A case report of Sheehan's syndrome with acute onsethyponatremia and severe anemia. Acta Biomed 2009;80:73-76.
[19]. Fatma M, Mouna E, Nabila R, Mouna M, Nadia C, Mohamed A. Sheehan's syndrome with pancytopenia: a case report and review of the literature. J Med Case Reports 2011; 5: 490.
[20]. Akoz AG, Atmaca H, Ustundag Y, Ozdamar SO. An unusual case of pancytopenia associated with Sheehan's syndrome. Ann Hematol 2007,86:307-308.

[21]. Gokalp D, Tuzcu A, Bahceci M, Arikan S, Bahceci S, Pasa S. Sheehan's syndrome as a rare cause of anemia secondary to hypopituitarism. Ann Hematol 2009,88:405-410.
[22]. Kim DY, Kim JH, Park YJ, Jung KH, Chung HS, Shin S et al Case of complete recovery of pancytopenia after treatment of hypopituitarism. Ann Hematol 2004,83:309-312.
[23]. Laway BA, Bhat JR, Mir SA, Khan RS, Lone MI, Zargar AH. Sheehan's syndrome with pancytopenia--complete recovery after hormone replacement (case series with review). Ann Hematol 2010,89:305-308.
[24]. Ferrari E, Ascari E, Bossolo PA, Barosi G. Sheehan's syndrome with complete bone marrow aplasia: long-term results of substitution therapy with hormones.Br J Haematol 1976;33:575-582.
[25]. Ozdogan M, Yazicioglu G, Karadogan I, Cevikol C, Karayalcin U, Undar L. Sheehan's syndrome associated with pancytopenia due to marrow aplasia: full recovery with hormone replacement therapy. Int J Clin Pract 2004,58:533-535.

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