

Issue: Ir Med J; Vol 113; No. 8; P166

## Sheehan's Syndrome: A Syndrome Becoming Rare Due to Improved Obstetric Care

N.C. Armstrong<sup>1</sup>, M. Ryan<sup>1,2</sup>

- 1. Graduate Entry Medical School, University of Limerick, Limerick, Ireland.
- 2. Bon Secours Hospital Limerick at Barringtons, Limerick, Ireland.

Sheehan's syndrome occurs as a result of ischemic necrosis of the pituitary gland due to postpartum hemorrhage and was first described in 1937. Improvement of obstetric care including availability of blood products has led to a reduction in the prevalence of Sheehan's syndrome by seventy-five percent (75%) in the past half century in developed nations. Symptoms usually develop years after delivery with one study reporting a mean duration between time of diagnosis and date of last delivery was 26.8 +/- 2.52 years. The delay in symptom onset can lead to delayed or misdiagnosis which occurred in this case.

The patient presented in this report was diagnosed at age 41 after giving birth to two healthy boys (G2P2) 20 years earlier. This patient's second pregnancy was complicated by gestational hypertension, pre-eclampsia, and a prolonged labor. These are documented in the literature as significant risk factors associated with postpartum hemorrhage.<sup>3</sup> The combination of pre-eclampsia and gestational hypertension can lead to hypoperfusion of the enlarged pituitary gland. The patient had a prominent history of tobacco use and a history of Familial Hyperlipidemia.

This patient presented at the age of 41 (G2P2) with extreme fatigue, decreased libido, failure of lactation, and oligomenorrhea which led to clinical investigations. Laboratory findings in the patient revealed hypopituitarism characterized by decreased morning cortisol levels, low TSH, low  $T_3/T_4$  levels, elevated LDL & triglyceride levels, low vitamin-D levels, decreased androstenedione and a moderate macrocytic anemia. At the age of 42 this patient had a DEXA scan revealing osteopenia in hip with a T score of -1.8. This was likely a result of the loss of normal estrogen levels and low vitamin D status, both of which are protective to bone.

This patient's current treatment regime is a hormone replacement regimen including steroid replacement, thyroid hormone replacement, vitamin D supplementation. This treatment regimen is in line with treatment protocol for Sheehan syndrome. Treatment of patients with hypopituitarism is the sum of the treatments of each of the individual pituitary hormonal deficiencies detected in a patient with pituitary or hypothalamic disease.

The patient in this report had non-pituitary related endocrine abnormalities which delayed diagnosis and treatment of her condition. These non-pituitary abnormalities included an extremely low Vitamin D level and a moderate macrocytic anemia.

The literature does not report similar findings, but it is plausible that these abnormalities were the result of other major pituitary and endocrine abnormalities. The literature also does not report any association between Familial Hyperlipidemia and increased risk for developing Sheehan's syndrome.

In summary, we report a case of Sheehan's syndrome in a 41-year-old woman characterized by a misdiagnosis and nonpituitary related abnormalities present alongside the classic clinical picture of Sheehan's syndrome. This case report supports the literature in the late onset of symptoms and should inform physicians to consider the diagnosis of Sheehan's syndrome when other endocrine abnormalities are present alongside the classic presentation of Sheehan's syndrome.

## **Corresponding Author:**

Graduate Entry Medical School, University of Limerick, Limerick, Ireland.

Email: nicholas.armstrong@mail.utoronto.ca

## References:

- 1. Kristjansdottir, H. L., Bodvarsdottir, S. P., & Sigurjonsdottir, H. A. (2011). Sheehan's syndrome in modern times: A nationwide retrospective study in Iceland. 164: 349-354.
- 2. Karaca Z, Laway BA, Dokmetas HS, Atmaca H, Kelestimur F. Sheehan syndrome. Nature Reviews Disease Primers. 2016 Dec 22;2(1):1-5.
- 3. Dökmetaş HS, Kilicli F, Korkmaz S, Yonem O. Characteristic features of 20 patients with Sheehan's syndrome. Gynecological Endocrinology. 2006 Jan 1;22(5):279-83.