Central Hypopituitarism with secondary adrenal insufficiency after postpartum hemorrhage in a 41 years old female patient

ABSTRACT:

The case about female presented with chronic fatigue for more than 1 year with progressive weight loss and her basic blood investigations were normal and mis diagnosed as gastritis due to H-PYLORI Infection with multiple courses of antibiotics but after careful history taking a relation made between onset of her symptoms and her last complicated childbirth followed by failed lactation , so focused laboratory investigations requested to rule out pituitary infarction and secondary adrenal insufficiency which was confirmed and patient started to get the proper treatment and follow up with much improvement later on.

In conclusion, this case demonstrates the typical symptoms and difficulties in diagnosing Sheehan syndrome. While H. pylori infection can contribute to gastrointestinal symptoms, a thorough history taking is crucial to differentiate it from other causes of chronic fatigue and weight loss. This comprehensive approach can prevent unnecessary treatment and ensure timely diagnosis of potentially more serious conditions. It is crucial to regularly follow up and monitor patients with Sheehan syndrome to effectively administer hormone replacement therapy and identify any developing endocrine issues.

Keywords: Sheehan's syndrome, pituitary infarction, postpartum bleeding

INTRODUCTION:

Postpartum hypopituitarism, also known as Sheehan's syndrome, is a rare condition characterized by pituitary insufficiency following childbirth [1][2]. It can manifest with various hormonal deficiencies due to pituitary damage, often leading to symptoms like lactation failure, amenorrhea, and fatigue [3]. Patients may experience complications such as congestive heart failure and severe hyponatremia, which can be attributed to impaired water excretion and inappropriately increased vasopressin levels [4]. Studies suggest that postpartum hypopituitarism can result in partial diabetes insipidus, indicating neurohypophysis damage and impaired osmoregulation of vasopressin secretion [5]. Additionally, post-trauma hypopituitarism, although rare, can occur following severe head injuries, leading to various hormonal deficiencies and necessitating hormone replacement therapy [7,8].

It is important to be cautious when diagnosing H. pylori infection,[6] especially in patients experiencing non-specific symptoms such as chronic fatigue and weight loss. Conducting a detailed patient history can help identify other possible causes that may need to be investigated further. However, it's still crucial not to completely dismiss H. pylori testing, as it plays a significant role when the clinical presentation fits established diagnostic criteria.

CASE PRESENTATION:

41 years female p6 with history of chronic fatigue , anorexia , unintentional weight loss (79 kg to 43 kg within 1 year) ,amenorrhea and failed lactation after her complicated C.S delivery last February 2023,it was IVF pregnancy followed by C.S. delivery complicated postpartum hemorrhage as per the patient.
so I suspected Sheehan syndrome and requested laboratory tests to confirm my diagnosis which showed low Free T 4 and low Cortisol /IGF1, LH and FSH.

Her surgical history includes history of cholecystectomy and appendectomy before history of H pylori infection and treated in KSA, her family history was unremarkable.

I referred the patient urgently to endocrine clinic where they did MRI which confirmed the diagnosis of secondary pituitary hypoplasia with secondary empty Sella, patient eventually diagnosed with secondary adrenal insufficiency and central hypopituitarism and started on cortisone replacement followed by levothyroxine and for follow up.

Discussion and Conclusion:

This case study emphasizes how important a thorough history is to the identification and treatment of postpartum pituitary infarction. Pituitary infarction can appear as a number of different illnesses during the postpartum period, which presents a diagnostic challenge for medical professionals. But with a thorough history that includes asking about recent childbirth, symptoms that point to hormonal dysregulation, and any relevant medical history, among other risk factors, clinicians can more successfully narrow down the differential diagnosis and move quickly toward the right diagnostic testing and treatment.

This case also highlights the significance of keeping a high index of suspicion for uncommon but possibly dangerous illnesses throughout the postpartum phase. In order to avoid problems and improve patient outcomes, prompt recognition and management are essential.
In conclusion, this case report emphasizes how important it is to take a thorough history when negotiating the diagnostic complexities of postpartum pituitary infarction. Healthcare professionals can improve patient care in the postpartum period and improve outcomes by quickly diagnosing and intervening when small clues in the patient's history are recognized.

Sheehan syndrome is a rare but serious condition resulting from ischemic necrosis of the pituitary gland due to severe postpartum hemorrhage. The clinical presentation of this condition can be variable, often manifesting with a range of endocrine deficiencies that may be acute or develop gradually over time. The clinical suspicion of Sheehan syndrome in this patient was supported by her symptoms and was further substantiated by laboratory findings. The laboratory results revealed low levels of Free T4, cortisol, IGF-1, LH, and FSH. These findings are consistent with hypopituitarism, particularly affecting the thyroid, adrenal, and gonadal axes. The MRI confirmed secondary pituitary hypoplasia with secondary empty sella, reinforcing the diagnosis of Sheehan syndrome.

This case underscores the importance of early recognition and prompt management of Sheehan syndrome. The diagnosis should be considered in postpartum women presenting with symptoms of hypopituitarism, especially if there is a history of significant postpartum hemorrhage. Timely intervention with hormone replacement therapy can significantly improve the patient's quality of life and prevent long-term complications associated with untreated hypopituitarism.

The case underlines the typical presentation of Sheehan's syndrome and the risk of delayed diagnosis due to an incomplete medical history. According to Berhe et al. (2022) and other researchers (Davi et al., 2023), Sheehan's syndrome may display a variety of symptoms and develop gradually following significant postpartum bleeding. Maintaining a high level of suspicion and gathering a comprehensive history, including obstetric details, are essential for early detection (Bhushan et al., 2020). In this instance, a thorough medical history revealed the crucial connection between the patient's symptoms and her postpartum hemorrhage, prompting further investigation for Sheehan's syndrome.

In conclusion, this case illustrates the classic presentation and diagnostic challenges of Sheehan syndrome. Regular follow-up and monitoring are essential components of managing patients with Sheehan syndrome to ensure effective hormone replacement and to address any emerging endocrine dysfunctions.

Consent

As per international standards or university standards, patient(s) written consent has been collected and preserved by the author(s).

Ethical Approval:

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

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1.

2.

3.

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