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Sheehan's Syndrome and Panhypopituitarism

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Abstract

Sheehan's syndrome, also known as postpartum pituitary gland necrosis is a condition that affects women who lose a life-threatening amount of blood during childbirth. In this report, data was collected from different three sources. The first study concluded that 99% of cases develop panhypopituitarism. The second study showed that not every case developed panhypopituitarism as some only had partial hypopituitarism. The third study differs from the other two studies as they wanted to see if Sheehan's syndrome is the most common cause of panhypopituitarism and the results were like expected.

Introduction

Sheehan's syndrome (SS) also known as postpartum pituitary gland necrosis is a condition that affects women who lose a life-threatening amount of blood in childbirth. It is considered the most common cause of panhypopituitarism in developing countries, it represents a rare cause of pituitary insufficiency, produced by an ischemic pituitary necrosis due to severe hemorrhage at deliverance.[1] However, diagnosis can be missed due to varied clinical presentations and epidemiologic data indicate that, nowadays, this disease is quite rare in developed country. So the aim of the report is: To determine and evaluate the clinical and hormonal characteristics of cases with Sheehan's syndrome diagnosed and follow-up from different sources and compare the results.[2]

Discussion

In this report data from three different studies have been gathered to assess the different results of clinical manifestation of Sheehan's syndrome

First study: - included, in this retrospective study, 13 patients, mean age 58±10.9 years, diagnosed with Sheehan's syndrome. Data about medical history, routine laboratory determinations, hormonal parameters, pituitary imaging were reviewed. All the cases presented a history of severe uterine bleeding after last delivery. The age at diagnosis for these patients varied between 19 and 54 years. All patients except one of the cases had an assisted deliverance, more than half of the cases (53.8%) came from rural areas. Due to severe uterine bleeding, hysterectomy was performed in 7 patients (53.8%). In 12/13 subjects, breastfeeding was not possible. The diagnosis of Sheehan's syndrome was established after 0.5 to 28 years from pathological deliverance. The longest delay between the moment of delivery and those of diagnosis was 28 years. All the cases presented corticotropin, thyrotropin and gonadotropins deficiency at the moment of diagnosis. Growth hormone deficiency was documented in 2 patients ,one subject was diagnosed with central diabetes insipidus and 11 patients developed panhypopituitarism.[2]

It is thus concluded that uterine bleeding always follows Sheehan syndrome and it is almost always present with three major hormone deficiencies; corticotropin, thyrotropin and gonadotropins and in rare cases growth hormone deficiency and 99% of patients developed panhypopituitarism.

Second study: - A retrospective assessment of the medical records of 114 patients with SS was conducted. In addition, sella turcica volumes of 29 healthy women were compared with those of patients by magnetic resonance imaging examinations.

Results: The mean period of diagnostic delay was 19.7 years in patients with SS. It was found that 52.6% of patients had nonspecific complaints, 30.7% had complaints related to adrenal insufficiency, and 9.6% had complaints related to hypogonadism when diagnosed. At the time of diagnosis, 55.3% of the patients had panhypopituitarism, while 44.7% had partial hypopituitarism. The number of deficient hormones was found to be increased over the years.[3]

This concluded that in some cases clinical presentation it may be specific to adrenal gland damage and rarely related to gonadal organs but commonly panhypopituitarism is present.

Third study: - this study differs from the others as they wanted to see if Sheehan syndrome is the most common cause of panhypopituitarism. A retrospective study was done between May 2011 and May 2015 in tertiary care hospital. The records of patients with hypopituitarism were reviewed and clinical features, hormonal profile and radiological investigations were noted. **Results:** Total 14 patients of panhypopituitarism included with an average duration of symptoms 1.93± 1.96 years. four (28.57%) were males and ten (71.43%) were females with mean age of diagnosis 37.78± 13.68 years. Sheehan's syndrome was the most common cause of panhypopituitarism in 80% (8 patients 0f 10 female patients), followed by post-surgery complications in 14.28% (2 patients).[4]

Thus, it is concluded that panhypopituitarism is a major complication of Sheehan's syndrome.

Conclusion

In conclusion, all collected data from the three different studies agreed that panhypopituitarism is commonly a complication of Sheehan syndrome and the specific hormone deficiencies are corticotropin, thyrotropin and gonadotropins and rarely growth hormone, however, the second study believed that not all cases develop panhypopituitarism as it could start as partial hypopituitarism and the diagnosis is delayed in some cases.

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