Extensive clinical experience in Sheehan's Syndrome: a report on 60 cases

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Abstract

Objectives: to determine clinical and hormonal characteristics of 60 consecutive patients with Sheehan's Syndrome who presented to the Endocrinology Unit of the Mexico Hospital at San Jose, Costa Rica

Materials and methods: We have evaluated 60 patients with Sheehan´s syndrome from 1969. to 1999. Medical histories of all the subjects and physical exams were taken personally by the first Author. Those who had history of any disease which might affect the pituitary such as cranial radiotherapy, head trauma or head surgery were excluded from the study. Patient's symptoms at initial evaluation and physical and laboratory findings were reviewed. Diagnosis of Sheehan´s syndrome was established with the help of medical history; physical findings and measurements of pituitary hormone levels. CBC and fasting blood chemistry including glucose, Na, K, Cr, BUN, total cholesterol and triglyceride levels were analysed. Hormone analyses were performed with routine.RIA and or ELISA measuring serum basal TSH and or after TRH, free T4, basal prolactin and or after TRH, basal FSH, LH and or after LHRH. GH and cortisol levels were measured by insulin tolerance test with 0,1 Units Insulin/Kg

Results: mean age at presentation was 45.76 ± 10.55 years.The average time between last partum and diagnosis was 13 years. 41.7% had delivery at home, 56.7% had vaginal delivery, 21.7% cesarean, 3.3% used forceps. 80% had hemorrhage and shock was present in 51.7%; 48.3% required transfusion. Regarding obstetrical complications, 20% had placental retention, 11.7% abrupt placentae, 8% abnormal presentation, 7% multiple gestation (3 twins, 1 triplet), 7% puerperal sepsis, 7% total hysterectomy, 3.3% eclampsia. Symptoms started on average 3.7 ± 3.61 years after last delivery. Symptoms included asthenia and adynamia (85% of patients), failure of resumption menses (73.3%), loss of axillary or pubic hair (66.7%), lack of postpartum milk production (65%), dry skin (65%), low libido and cold intolerance (60%), hyporexia and cognitive changes (53.3%), 46,7% were bradypsychic, 30% nausea or vomits, 48.3% with weight loss, 28.3% edemas, 15% constipation, On physical exam: 41% were overweigth or obese, 38% had normal weight, and 21% underweigth. Average B.P. was 110/70.66, 94% had no axillary hair, 93% had no pubic hair, 80% dry skin, 70% were pale, 58% vaginal atrophy, 43.3% with slow reflexes, 33% mammary gland atrophy, 17% bradypsychic or with myxedema. Laboratory findings included 63.82% with anemia, 23.4% had lymphocytosis, 44,68% had eosinofilia, 21% hyponatremia, 15% hypoglycemia, 42% had hypercholesterolemia .(mean total cholesterol 274 mg/dl) and 25% high triglycerides (mean 318.75 mg/dl). When combined pituitary test was performed, 100% had growth hormone deficiency, 96.6% adrenal cortex failure, 80.% secondary hypothyroidism, 69.2% prolactin deficiency, 75% had hypogonadotrophic hypogonadism. 13.2% had 1 hormonal axis affected, 52.6% 2 axis, 13.2% 3 axis, 13.2% 4 axis, 5.3% 5 axis and 6 axis 2.6%.

Conclusions: 1) Sheehan's syndrome is diagnosed late, nevertheless the symptoms start early in the majority of patients. 2) Hemorrhage during the last delivery, specially if severe and with shock or transfusion, is the most important finding in obstetrical history 3) Abcense of amenorrhea (18,3%) or post partum lactation (15%) does not rule out the diagnosis of Sheehan Syndrome 4) At the physical exam the majority of Patients are of normal weight or overweight, have frank diminution or absence of axillary and pubic hair, are pale, with dry skin and vaginal atrophy 5) General laboratory usually shows anemia, eosinophylia and limphocytosis, tendency to or frank hyponatremia, hypoglycemia, and high total cholesterol and triglycerides

Background

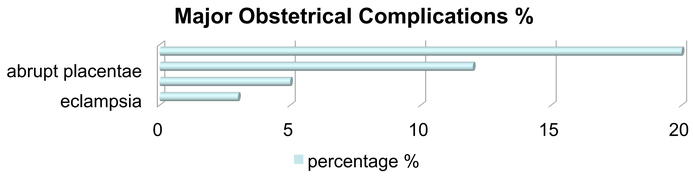
Sheehan´s syndrome is the name given to postpartum hypopituitarism. The syndrome is caused by infarction in the adenohypophysis, usually precipitated by massive uterine hemorrhage. Extensive destruction of the cells results in varying degrees of hypopituitarism. (Kovacs 2003). The frequency of Sheehan´s syndrome has gradually decreased over the world particularly in developed countries as a result of improved obstetrical care including treatment of hemodynamic complications with rapid blood transfusion and/or fluid replacement.

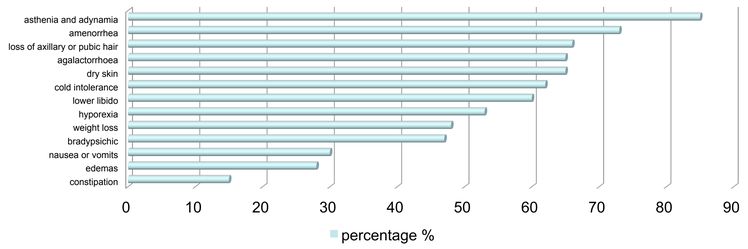
The spectrum of clinical presentation is very large and changes from non-specific complaints such as weakness, fatigue and anemia to severe pituitary insufficiency resulting in coma and death. Most patients have mild disease, go undiagnosed for a long time and are treated inappropriately. Patients usually present months to years after the last delivery complicated by severe vaginal bleeding with a history of failure of postpartum lactation, failure to resume menses and the symptoms and findings of anterior hypopituitarism. The mean duration between postpartum hemorrhage and the subsequent clinical manifestations varies from 1 to 33 years. (Kovacs 2003)

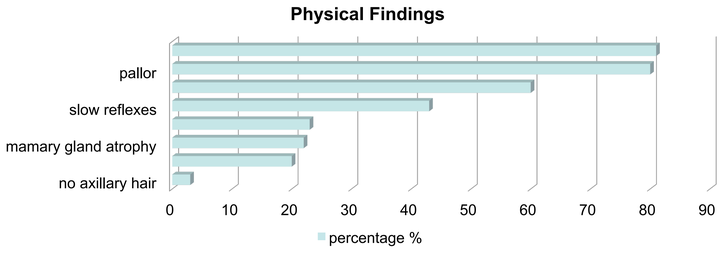
Hormonal deficiency varies from loss of a single trophic hormone to classic panhypopituitarism. Failure of postpartum lactation along with failure of mentsruation are the most common presentation findings of patients with Sheehan´s syndrome. Adrenocortical insufficiency is one of the most important outcomes of Sheehan's syndrome.

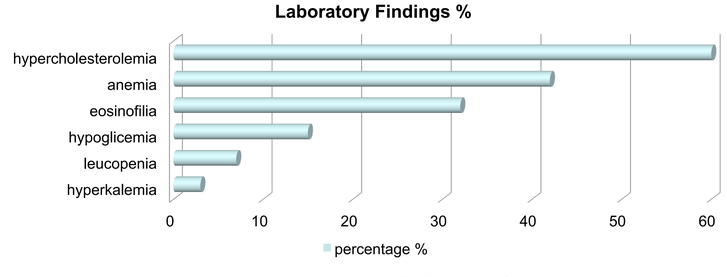
Results

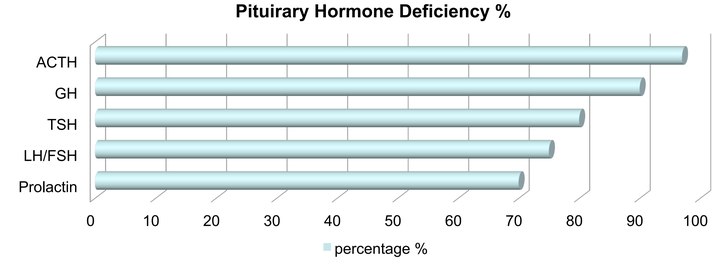
A total of 60 patients were included in the study. Average age at presentation was 45.76 ± 10.55 years. Last delivery age was 32.8 ± 7.07 years and last menses was at 33.2 ± 8.17 years. 41.7% had delivery at home, 56.7% had a vaginal delivery, 21.7% cesarean, 3.3% used forceps. Shock was present in 51.7% and 80% had hemorrhage. 48.3% required transfusion..

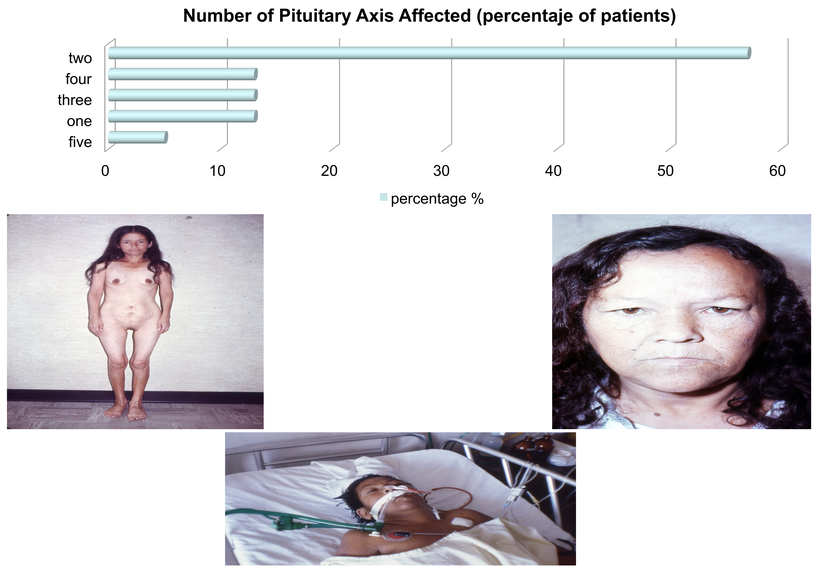












Discussion

Sheehan Syndrome-was the second most common cause of hypopituitarism in Costa Rica during the last 3 decades of last century. Actually is a rare cause. We had 4 pregnancies in 3 patients with Sheehan: one with induction of ovulation and 3 spontaneuous with replacement treatment with hidrocortone, Syntrhroid and Progyluton. On repeated Combined Pituitary Test post partum We were not able to demostrate any recovery in any axis. Nevertheless one patient was able to lactate.

Conclusion

The Endocrine Laboratory showed that the HGH response to the Insulin Tolerance Test and the PRL response to the TRH were abnormal in all patients and confirms the diagnosis. Other pituitary hormones in selected cases may be normal and or show a normal response to usual stimulatory tests. Cortisol circadian rhythm is characteristically flat, with fixed and low values without the normal reduction at evening and night.

All patients have a small, normal size pituitary or empty sella at when evaluated by computer tomography. We recommend a Combine Pituitary Test in all the Patients (ITT for HGH and cortisol, LHRH for LH and FSH, TRH for TSH and PRL and basal FT4, E2 to determine the axis affected and give a rational supplementary treatment.

References

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