

## PREGNANCY AND ENDOCRINE DISORDERS

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This workshop on pregnancy and endocrine disorders is organized by the Belgian Internal Medicine Society. This section is intended to clinicians and internists to increase their diagnostic skills in internal medicine and endocrine pathology. We present several cases dealing with pregnant patient with endocrine problems.

A 23-year-old woman is investigated for persistent hCG levels after a miscarriage. She undergoes several unnecessary investigations and invasive procedures, indeed detectable hCG proves to be a false positive (1,2). While low levels of hCG is still detected in serum, no hCG is detected in the urine. In addition, when serum is processed in a HBT tube for revealing heterophilic antibodies, hCG is no longer detected. Such findings, as previously reported in the literature (1), indicate the presence of phantom hCG due to heterophilic mouse antibodies interaction. Spurious hCG has been referred to as "pseudohypergonadotropinemia" or "phantom hCG" (1-3). Such false-positive results led some women to a misdiagnosis of gestational trophoblastic disease. This case raises the need of clinico-biological discussion to avoid inappropriate therapeutic decisions. Current gynecological protocols for the diagnosis and treatment of trophoblastic disease should consider the inclusion of hCG test in urine and/or a test for heterophilic antibodies, when appropriate (3).

A 36 years old female is diagnosed with euthyroid Hashimoto Thyroiditis. In 2016 she attends the emergency department because of progressive dyspnea, tachycardia and bilateral legs edema. Thyroid reevaluation shows severe thyrotoxicosis, an inflammatory pattern on thyroid ultrasounds and high serum TBII antibodies, characteristics of Graves' disease. As hCG test indicates that she is pregnant, medical treatment with propylthiouracil and betablocquers is started. Hyperthyroidism is difficult to control during the first and second trimesters. Unexpectedly, antithyroids must be stopped in the last trimester because of thyroid hormones normalization and TBII antibodies disappearance. The conversion of Hashimoto's thyroiditis (HT) to hyperthyroidism due to thyrotropin receptor antibodies is intriguing and considered rare. It is still an underestimated clinical feature for most clinicians. In our experience, this phenomenon was observed in less than 1% of patients with Hashimoto thyroiditis, sometimes associated with autoimmune gastritis (4). However, the conversion from HT to GD has been described as prevalent in 25.7% of cases in a controlled series of 35 children with either Down or Turner Syndrome (5). The contribution of TSH

receptor blocking antibodies (TRAb), which may be stimulators (TSAb) or blockers (TBAb), is suspected (4,5).

A 36 years old patient underwent a fertility treatment attempting a pregnancy. At the end of the first trimester of pregnancy, she is noted to have hypertension, edema and hypokalemia. Surreptitious diuretic consumption, primary and secondary hyperaldosteronism are ruled out. Diagnosis of gestational CS was established due to an adrenocortical adenoma (6). A multidisciplinary approach, including surgery during pregnancy, was necessary during follow up. Cushing's syndrome (CS), which is often associated with infertility, exceptionally occurs in pregnancy, thus increasing maternal and fetal morbidity and mortality (6,7). Gestational CS can be challenging. Indeed symptoms of hypercorticism may overlap with physiological hyperactivity of the hypothalamus-pituitary-adrenal axis in normal pregnancy. We discuss our case and the views of current literature.

## References

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