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Thyroid Dysfunction During Pregnancy

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Relevance

In the first half of pregnancy, human chorionic gonadotropin (hCG) production by the placenta increases, which is similar in structure to thyroid-stimulating hormone (TSH) and has TSH-like effects, stimulating the production of thyroid hormones [1]. Therefore, the level of thyroid hormones increases, and the mechanism of "feedback" suppresses TSH. Decrease of hCG secretion during pregnancy further leads to a decrease of free T4 (fT4) and free T3 (fT3) and leads to normalization of TSH level [2,3]. Thyroid hyperfunction and presented symptoms subside with a decrease of hCG production, usually at 14–18 weeks of getation. In most cases, the cause of hyperthyroxinemia is gestational transient thyrotoxicosis, which occurs in the first half of pregnancy. This condition, which is characterized by an increased level of fT4 and a decrease of serum TSH, is diagnosed in approximately 1-3% of pregnant women [4,5].

Clinical Observation

Patient A., born in 1994, came to the RSSPMC of Endocrinology at 11.05.2018y with complaints to palpitations, nausea, vomiting 5-6 times a day, irritability, tremor, weight loss.

Endocrinological history

Patient a year ago took Iodomarin 200 1tab in the morning for the treatment of diffuse euthyroid goiter. The above complaints began to increase within a month.

Gynecological History

Menarche - from 14 years, menstruation for 4-5 days, after 28 days, regular, painless. Patient denies any gynecological diseases.

Obstetric History

First pregnancy ended with an urgent and normal birth with the birth of a full-term alive baby, second pregnancy - intrauterine death of the fetus at 4-5 weeks (patient associates this condition with SARS), third pregnancy ended with an urgent and normal birth with the birth of a full-term alive baby, fourth ended with miscarriage in 3-4 weeks [6]. Current pregnancy - occurred independently. Pregnancy flows with toxaemia from 5-6 weeks of pregnancy (vomiting 5-6 times a day). From 6 weeks of pregnancy, come out anemia of pregnant women (she does not take antianemic drugs).

Objective Data

General condition of patient is relatively satisfactory. Skin - clean, pale, palms are moist. Pulse 90 beats per minute. Blood pressure 110/80 mm Hg. On the auscultation on lungs vesicular breathing, heart sounds are clear rhythmic. On palpation abdomen is soft, painless in all areas. Thyroid gland on palpation enlarged to II st, soft elastic, painless.

Laboratory Tests

hemoglobin 95 g/L, blood glucose 4.9 mm/L, TSH 0.02 mU/L, fT4 - 4.37 ng/dl, antibodies to TPO 20.2 U/ml, antibodies to TSH receptors 0,01 U/L, ultrasound of the thyroid gland - picture of diffuse goiter.

Obtained data allowed formulating the following diagnosis:

Primary: Gestational Transient Thyrotoxicosis.

Concomitant: Pregnancy V, childbirth III, 8-9 weeks moderate severity anemia. Toxemia of pregnancy.

Considering erased complaints, the absence of thyrotoxicosis in clinical history, clinical signs of thyrotoxicosis, weight loss and low levels of antibodies to TSH receptors, to the patient recommended symptomatic treatment: beta-blockers, antianemic drugs, sedatives and hospitalization to specialized gynecology department for the treatment of toxemia of pregnant women. After re-examination in one-month patient had no complaints [7]. The skin had normal moisture. Pulse 80 beats per minute. Blood pressure 110/80 mm Hg On the auscultation on lungs vesicular breathing, heart sounds clear rhythmic. On palpation, the abdomen is soft, painless in all areas. On palpation, thyroid gland enlarged to II st, soft elastic, painless. Laboratory tests: hemoglobin 110 g/L, TSH 1.0 mU/L, fT4 2.0 ng/dl. The general condition of the patient with symptomatic treatment has

improved. Tachycardia and vomiting - not observed. Indicators of thyroid hormone studies returned to normal. Monitoring continues.

Conclusion

In this observation, patient had symptoms of gestational transient thyrotoxicosis. A similar picture of gestational transient thyrotoxicosis and thyrotoxicosis often leads to several diagnostic errors and leads to incorrect treatment tactics and to prescribing unreasonable appointment of antithyroid drug. Thus, when observing symptoms of thyrotoxicosis at the beginning of pregnancy, more attention to complaints, history of thyrotoxicosis, the severity of clinical signs of thyrotoxicosis, thyroid ultrasound, low levels of TSH receptors antibodies and slightly elevated levels of free T4 and TSH. During the diagnosis of gestational transient thyrotoxicosis, antithyroid drug not recommended, more preferred symptomatic treatment. By the middle of the second trimester, patient's clinical condition is improving, and indicators of the hormonal status are normalized due to the physiological decrease of hCG.

References

1. Ubaydullaeva NB, Allayarova GI, Nasyrkhodzhayev YaB, Davletyarov DG, Almuradov FF (2018) Modern aspects of the treatment of Graves' disease. Pediatrics 2: 99-100.
2. Ubaydullaeva NB (2010) Features of the pregnancy course in women with diffuse toxic goiter. International Endocrinological Journal 4(28): 40-43.
3. Ubaydullaeva NB (2011) Comparative study of the course and outcome of pregnancy in women with compensated and decompensated diffuse toxic goiter. Problems of Biology and Medicine 2: 35-37.
4. Andersen Stine Linding, Olsen Jørn (2017) Early Pregnancy Thyroid Function Test Abnormalities in Biobank Sera from Women Clinically Diagnosed with Thyroid Dysfunction Before or After Pregnancy. Thyroid 27(3): 451-4598.
5. Efterpi Tingi, Akheel A Syed, Alexis Kyriacou, George Mastorakos (2016) Benign thyroid disease in pregnancy: A state of the art review. Journal of Clinical & Translational Endocrinology 6: 37-49.
6. Erik K Alexander, Elizabeth N Pearce, Gregory A Brent, Rosalind S Brown, et al. (2017) Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease During Pregnancy and the Postpartum. Thyroid 27(3): 315-389.
7. Yoshihara A, Noh JY, Mukasa K, Suzuki M (2015) Serum human chorionic gonadotropin levels and thyroid hormone levels in gestational transient thyrotoxicosis: is the serum hCG level useful for differentiating between active Graves' disease and GTT? Endocr J 62(6): 557-560.

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