

FREQUENCY OF OCCURRENCE OF THYROID PATHOLOGY IN WOMEN WITH INFERTILITY

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Abstract: In Uzbekistan today, more than 25 thousand women and 7 thousand men are diagnosed with infertility under dispensary observation. At the same time, the number of people who do not turn to doctors, according to experts, is much higher [9].

The problem of the relationship between reproductive function disorders and thyroid pathology is actively discussed in the scientific literature, since thyroid diseases are among the most common endocrinopathies in women of reproductive age [2, 3, 8]. Autoimmune thyroid diseases (AITD) - autoimmune thyroiditis (AIT), which is the main cause of hypothyroidism, and Graves' disease (GD), which occurs with thyrotoxicosis, occur in approximately 5% of the world's population and can lead to the development of pathology in the reproductive system of women in the form of menstrual irregularities, infertility, miscarriage, pathology of fetal and newborn development [3, 4, 6, 7, 8]. Screening assessment of thyroid function has not been introduced into the practice of obstetricians, gynecologists and reproductive specialists.

As is known, any strategy for screening and potential treatment of thyroid disorders in infertility must be based on objective data indicating the impact of these disorders on fertility. In this regard, it is necessary to clarify the frequency and structure of thyroid pathology in women with infertility and to assess the role of various types of thyroid pathology in the genesis of reproductive disorders.

Keywords: Thyroid gland (TG), autoimmune thyroiditis (AIT), hypothyroidism, diffuse goiter (DG), hyperprolactinemia, infertility.

Purpose of the study: To evaluate the role of thyroid pathology in women with infertility.

Materials and methods: 42 women aged from 20 to 37 years who applied to the endocrine department with infertility were examined. Research methods included assessment of thyroid function (thyroid-stimulating hormone (TSH), free thyroxine (T4 free)), antibodies to thyroid peroxidase (AT-TPO) and thyroglobulin (AT-TG), prolactin, ultrasound of the thyroid gland.

Research results and discussion. Among the women with infertility who applied to the endocrine department, according to anamnestic data, it was revealed that 18 of them suffered from primary, 24 from secondary infertility. All women had previously been treated in gynecological departments.

According to the results of an ultrasound examination, the presence of pathological changes in the structure of the thyroid gland was revealed in 80.9% (34), in the remaining 19.1% (8) the gland was without echopathology. Most women had diffuse goiter of varying degrees (1-2 degrees) - 52.4% (22), 19% (8) had signs of thyroiditis, 9.5% (nodular goiter).

When assessing the results of a hormonal examination of thyroid function, it was revealed that 9.5% (4) of women had subclinical hypothyroidism, 24.3% (6) suffered from hyperthyroidism, and the remaining 76.2% (32) had euthyroidism.

AIT was diagnosed in 19% (8). In the structure of AIT, 50% (4) had a destructive phase, which was confirmed by high titers of AT-TG and AT-TPO and the presence of hyperthyroidism, ultrasound data, 25% (2) had subclinical hypothyroidism, 25% had no disturbances in thyroid function glands (table 1.). The hormonal status of the thyroid gland in women with diffuse goiter of 1-2 degrees was as follows: 81.8% (18) were in a euthyroid state, 9.1% (2) had subclinical hypothyroidism, 9.1% had signs of thyrotoxicosis.

In women with nodular goiter, no disturbances in thyroid function were identified. Persons with a normal echo picture of the gland according to ultrasound data also did not have any disturbances in the hormonal function of the thyroid gland.

Table 1. Structure of thyroid pathology in patients with infertility.

| Nature of thyroid pathology | | <i>n</i> | % |
|------------------------------|--|----------|-------|
| No thyroid pathology | | 8 | 19% |
| There is a thyroid pathology | | 34 | 81% |
| Euthyroid goiter | Diffuse goiter | 18 | 42,9% |
| | Nodular goiter | 4 | 9,5% |
| Hypothyroidism | | 4 | 9,5% |
| Hyperthyroidism | | 6 | 14,3% |
| AIT | with thyroid dysfunction | 6 | 14,3% |
| | without disruption of thyroid function | 2 | 4,8% |

According to the results of a hormonal examination, it was revealed that 33.3% (14) of women suffered from hyperprolactinemia. The state of thyroid function among women with infertility and hyperprolactinemia was distributed as follows: in the majority of women 42.9% (6) with hyperprolactinemia, no pathology of the thyroid gland was detected; diffuse goiter of varying degrees in a state of euthyroidism was diagnosed in 28.6% (4), diffuse goiter with subclinical hypothyroidism in 14.3% (2), 14.3% had AIT in the destructive phase.

81% of women with infertility who applied had various thyroid disorders, most of them had

diffuse euthyroid goiter, which is confirmed in the work of S.G. Perminova “Pathology of the thyroid gland in women with infertility” [1]. Despite the fact that in the general structure of female infertility, pathology of the thyroid gland as its only cause occupies a rather modest place, fertility can be maintained even with obvious dysfunction of the thyroid gland. It is important to note that certain pathological phenomena of the thyroid gland very often accompany diseases that are the main cause of infertility.

Conclusions:

1. Assessment of thyroid function is necessary for any reproductive dysfunction.
2. The data obtained confirm the concept of the need for individual iodine prophylaxis for all women at the stage of pregnancy planning.
3. To prevent infertility and reproductive pathology, it is necessary to introduce an assessment of thyroid function to all women of fertile age when undergoing a medical examination upon marriage.

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