AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE
ISSN: 2996-5101 (online) | ResearchBib (IF) = 9.818 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

CLINICAL AND EPIDEMIOLOGICAL CHARACTERISTICS AND PREVENTIVE MEASURES OF EDEMATOUS GOITER AND AUTOIMMUNE THYROIDITIS IN RESIDENTS OF THE BUKHARA REGION.

https://doi.org/10.5281/zenodo.15664688

Sharipova Gulnihol Idiyevna
sharipova.gulnihol@bsmi.uz
https://orcid.org/0009-0009-0825-0534
Yormatova Madina Nurmurodovna
yormatova.madina@bsmi.uz
https://orcid.org/0009-0002-2959-7536

Abstract

The amount of T3 and T4 and TTG in the blood of patients increases. Biochemical analyzes show that liver and kidney function, carbohydrate, fat, protein and other types of metabolism are disturbed. An increase in the erythrocyte sedimentation rate (EOT), leukopenia, lymphocytosis, a decrease in the amount of hemoglobin and erythrocytes is detected in the blood.

Key words

Diffuse toxic goiter, remission, autoimmune thyroiditis, UTT test method, osteoporosis, hypertension, atherosclerosis.

Scientific literature shows that from a professional point of view, diffuse toxic goiter is more common in intellectual workers. The population living in rural areas is 3-5 times less likely to suffer from thyrotoxicosis. Apparently, a relatively calm and comfortable environment (natural factors, work in the open air) plays a significant role in this. Symptoms characteristic of thyrotoxicosis are found not only in the form of toxic goiter with diffuse hyperplasia, but also in pathological forms such as nodular (or multinodular), mixed[3,5].

The degree of development of thyrotoxicosis does not always depend on the degree of enlargement of the thyroid gland: sometimes the degree of development of thyrotoxicosis is high even with small gland sizes, or, conversely, thyrotoxicosis may almost not develop with large gland sizes. Thus, in goiter, the size of the thyroid gland does not always correspond to the severity of clinical symptoms. It should be noted that the high degree of thyrotoxicosis is often more pronounced in sporadic bulls. In endemic bulls, the degree of thyrotoxicosis may be low or not detected at all, despite the fact that the thyroid gland is often enlarged (or very large). Therefore, if the indication for surgery in sporadic bulls is due to the severe

AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE
ISSN: 2996-5101 (online) | ResearchBib (IF) = 9.818 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

development of thyrotoxicosis, then, on the contrary, in endemic bulls, the indication for surgery is often due to the excessive enlargement of the gland, its compression or displacement of nearby organs (larynx, trachea, etc.), which leads to impaired function, or for cosmetic reasons[1,3].

A person suffering from iodine deficiency mainly has nervousness, depressed mood, sleep disorders, weakness, memory loss, headaches and dizziness, undue anxiety, eye pain, tremors, tremors, suicidal thoughts, aggressiveness[2,3].

In the cardiovascular system, heart pain, increased blood pressure, rapid heartbeat, and various cramps appear. In severe forms of anemia that do not respond to medication, a violation of the ratio of blood formed elements may also be observed. In addition, various pains in the bones and muscles, swelling of the skin, frequent respiratory tract infections, menstrual disorders in women, infertility, hair loss, the appearance of spots on the skin, and constant dryness are observed[1,4].

The main symptoms of thyrotoxicosis are changes in the nervous and cardiovascular systems. Changes in the nervous and cardiovascular systems are clearly manifested in such symptoms as: irritability (excessive emotional excitability), restlessness, frequent mood swings, irritability and tearfulness. In addition, there is a sharp increase in the activity of the sympathetic nervous system: profuse sweating, tremor of all parts of the body, especially the fingers (Marie's symptom). The face often turns red, the neck and chest area are covered with diffuse red spots. Body temperature does not change. Tendon reflexes are preserved or hyperkinesis is observed. The patient's hair falls out, its color changes, nails become brittle and break. Anxiety, fear, lack of will, irritability, memory loss, and blurred vision are noted[3,5].

In most patients, disorders of the cardiovascular system: tachycardia (rapid heartbeat), arrhythmia, attacks of pain in the heart, shortness of breath, circulatory failure in the body come to the fore in the early stages. In category 1 patients, doctors think about the neuropsychiatric form of thyrotoxicosis, while category 2 patients are included in the category of patients with more pronounced changes in the cardiovascular system of thyrotoxicosis.

Early signs of thyrotoxicosis include general weakness without a cause. These signs of thyrotoxic myopathy are closely related to metabolic or metabolic disorders, and patients often note the following pronounced symptoms in the functioning of the gastrointestinal system: attacks of abdominal pain, vomiting, a tendency to diarrhea, and abdominal distension[2,5].

In men, sexual activity is somewhat reduced, and in women, the menstrual cycle is disrupted (even to the point of amenorrhea), ovarian and uterine

hypoplasia, and mammary gland atrophy may occur. These changes often lead to infertility.

In thyrotoxicosis, increased metabolic processes lead to excessive breakdown of proteins and fats, resulting in weight loss despite the patient consuming more food than usual. This leads to impaired water and electrolyte metabolism in the body (increased diuresis, thirst, profuse sweating), and impaired pancreatic function (latent diabetes mellitus).

As the disease progresses, most patients develop a series of “eye symptoms.” The “bulging” or bulging of the eye (exophthalmos) is associated with swelling, thickening, or fibrosis of the retrobulbar tissue, and metabolic disorders. Exophthalmos is one of the early, main symptoms of the disease[3,5].

Delrampel's symptom - a wide opening of the eyelids and a widening of the pupil - is called lagophthalmos, as a result of which a white line appears between the iris and the upper eyelid.

Stellvag's symptom - a rare blinking of the eye (opening and closing), giving the eye a distinctly motionless expression - a "fixed gaze" and a decrease in the sensitivity of the cornea of the eye are observed.

Graefe's symptom - when the patient looks down, the upper eyelid lags behind the edge of the pupil. In this case, a white line of sclera remains between the upper eyelid and the iris.

Kocher's symptom is the opposite sign to Graefe's symptom, in which when looking up, the same part of the sclera appears as a white stripe as a result of irregular, frequent, contraction of the eyelid - "eyelid contraction".

Moebius symptom - that is, the loss of the ability to see at close range (convergence disorder).

Melikhov's symptom - "looking with anger".

Ellinek's symptom - darkening of the skin of the upper eyelid.

Rosenbach's symptom - trembling of the eyelids when closing.

Zenger's symptom - puffiness and baggy drooping of the eyelids.

Dalmedi's symptom - "stiff face" (amymia). As a result of the increase in the tone of the facial muscles, facial expressions are inhibited, while other movements are preserved.

Exophthalmos occurring in thyrotoxicosis should be distinguished from malignant exophthalmos, which is associated with damage to the diencephalon and excessive production of thyroid hormone by the anterior pituitary gland. Malignant exophthalmos occurs mainly in middle-aged people. It can be unilateral or bilateral. The eyeball bulges so much that it protrudes from the eye socket. Patients are disturbed by severe pain in the orbit (eye socket), diplopia, and limited eye

AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE
ISSN: 2996-5101 (online) | ResearchBib (IF) = 9.818 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

movement. The presence of conjunctivitis, keratitis, and corneal ulceration predispose to corneal erosion. Changes in intraorbital pressure can lead to complete atrophy of the optic nerve[1,5].

The results of special investigations show that in severe types of thyrotoxicosis, the metabolism of the main substance can increase up to 60-70%, and in some cases it can be even higher. The absorption of iodine by the thyroid gland increases sharply compared to the norm in the first hours of the examination. The amount of T3 and T4 and TTG in the blood of patients increases. Biochemical analyzes show that liver and kidney function, carbohydrate, fat, protein and other types of metabolism are disturbed. An increase in the erythrocyte sedimentation rate (EOT), leukopenia, lymphocytosis, a decrease in the amount of hemoglobin and erythrocytes is detected in the blood [3,4].

Scintigraphy shows the distribution of isotope accumulation and allows for differential diagnosis between diffuse thyrotoxicosis and nodular thyrotoxicosis (toxic adenoma), in which the accumulation of the isotope in a specific area - a "hot nodule" is detected. The classification of thyrotoxicosis is completely consistent with the above classification in terms of shape and degree of enlargement, but it is divided into the following 3 categories according to the appearance or exacerbation of thyrotoxicosis symptoms:

- a) light type;
- b) medium weight;
- c) heavy type.

In a mild type of thyrotoxicosis, the neurological symptoms are not very pronounced (upset over trivial things, capriciousness, tearfulness, quick fatigue), the thyroid gland is enlarged, the patient's pulse is slightly accelerated - tachycardia (80-100 beats per minute), weakly expressed tremors in the hands and fingers. The patient may lose up to 10 percent of weight. Usually, in the second half of the day, the patient's ability to work is reduced. The exchange of the main substance does not exceed 30 percent [2,5].

Moderate thyrotoxicosis is manifested by obvious disorders of the central nervous system (irritability, irritability, moodiness, tearfulness), tachycardia (100-120 beats per minute), increased systolic and diastolic blood pressure, dilated heart borders, and the development of heart failure (I degree according to Lang). The patient's weight decreases significantly, despite good nutrition, there are cases of weight loss, and the ability to work decreases during the day. The basal metabolic rate increases by up to 60%[1,4].

Severe thyrotoxicosis - along with the central nervous system disorders characteristic of moderate thyrotoxicosis, severe weakness of the muscular system,

severe disorders of the cardiovascular system, dystrophic changes in parenchymal organs develop. Tachycardia deepens (more than 120 beats per minute), arrhythmias in most cases of ventricular arrhythmias, and heart failure (II-III degree according to Lange) develops. The basal metabolic rate increases by 60% or more, the patient becomes extremely thin, and body weight decreases sharply. In most patients, the ability to work and work capacity is completely lost.

REFERENCES:

1. Klinicheskie rekomendatsii Rossiyskoy Assotsiatsii Endokrinologov po diagnostike i lecheniyu autoimmunenogo thyroidita u vzroslyx. Sost. Dedov I.I., Melnichenko G.A., Gerasimov G.A., Fadeev V.V., Petunina N.A., Alexandrova G.F., Troshina E.A., Kuznetsov N.S., Vanushko V.E., 2013

2. Lechenie endokrinnyx zabolevaniy: Rukovodstvo/Balabolkin M.I., Klebanova E.M., Kreminskaya V.M. - Moscow: OOO "Meditsinskoe informatsionnoe agentstvo", 2008

3. Olifirova O.S. Hashimoto's autoimmune thyroiditis in surgical practice // Dalnevostochnyy meditsinsky journal, 3/2021. - pp. 13-15.

4. Rozhko V.A. Sovremennoe sostoyanie problemy autoimmune thyroiditis // Problemy zdorovya i ekologii, 2019. – p. 4-13.

5. Sadykhov F.G. Chirurgicheskoe lechenie bolnyx autoimmunenym thyreoiditom // Vestnik Natsionalnogo mediko-khirurgicheskogo Tsentra im. N.I. Pirogova 2023, vol. 18, No. 1. - p. 51-57.