

## CAUSES, ETIOLOGY AND PATHOGENESIS OF DIFFUSE TOXIC BULL DISEASE

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**Abstract:** *Diffuse toxic goiter (thyrotoxicosis, thyrotoxic goiter) excessive secretion of thyroid hormones is considered an endocrine disease it appears as a result, with severe disorders in various organs and systems will pass. This disease is not paid much attention among the people, but with serious complications It is a chronic disease, and it is important to pay special attention to it. This article provides information about the etiology, pathogenesis, and causes of Diffuse toxic goiter.*

**Keywords:** *Diffuse toxic goiter, hormone, thyrotoxicosis, endocrine diseases.*


### INTRODUCTION

There are many views on the origin of diffuse toxic goiter. Most scientists of our country support the neurogenic theory and emphasize that mental trauma (stress) is of great importance in the emergence of this disease. The founder of this theory S.P.

Botkin (1884): "There is no doubt that mental conditions have an influence not only on the course of Bazed's disease, but also on its development. "Kulfat, various losses, fear, anger, panic caused the rapid development of symptoms characteristic of Bazed's disease many times in a few hours," he wrote. S.A.Ma'sumov, M.S.Astrov analyzed the materials obtained from field expeditions and observations and noted that mental trauma (stress) is of great importance (up to 40-60%) in the etiology of diffuse toxic field.

The importance of infection in the etiology of diffuse toxic goiter is not great, but at least 5-6% of patients attribute their illness mainly to severe flu or angina. In the presence of constitutional and genetic factors predisposing to diffuse toxic






goiter - disorders of the endocrine system, it has also been proven that the effect of exogenous factors on the body is the cause. In patients with diffuse toxic goiter, a long-acting stimulator, LATS, has been detected in the blood, which acts as a specific antibody against the thyroid gland and is known to cause stimulation of the thyroid gland similar to the effect of thyrotropin. . An increase in the accumulation of T3 and T4 in the body disrupts the processes of oxidative phosphorylation in the tissues, which is evident in the disruption of all types of metabolism, the disruption of the central nervous system, heart, liver and other organs. , in most cases, women between the ages of 20 and 50 are affected. The ratio of female to male patients is  $\approx 10:1$ . The disease is more common in women due to the violation of normal relations between the sex glands and the hypothalamo-pituitary system, and this happens with the rapid synthesis of thyroid hormones. Clinic and diagnosis: The main symptoms of thyrotoxicosis are nervous and cardiovascular system changes. Changes in the nervous system are evident in symptoms such as nervousness (excessive mental excitability), restlessness, frequent mood swings, anger and tearfulness. In addition, there is a sharp increase in the activity of the sympathetic nervous system: profuse sweating, tremors in all areas of the body, especially in the fingers (Marie's symptom). The face is often reddened, the neck and chest are covered with spreading red spots.

Body temperature does not change. Foot reflexes are preserved or hyperkinesis is observed. The patient's hair falls out, their color changes, nails become brittle and break. Restlessness, fear, lack of will, irritability, restlessness, and blurred vision are noted. In most patients, disorders of the cardiovascular system: tachycardia (acceleration of the heartbeat), arrhythmia, pain attacks in the heart area, shortness of breath, lack of blood circulation in the body comes first in the early stages. In most patients, disorders of the cardiovascular system: tachycardia (acceleration of the heart beat), arrhythmia, pain in the heart area, shortness of breath, lack of blood circulation in the body first in the early stages takes place.

Early symptoms of thyrotoxicosis include general weakness for no reason. These symptoms of thyrotoxic myopathy are intrinsically related to metabolic or metabolic disorders, and patients often note the following obvious symptoms of the gastrointestinal system: abdominal pain attacks, vomiting, tendency to diarrhea, In men, sexual activity slows down a bit, and in women, the menstrual period (cycle) is disturbed (even up to amenorrhea), ovaries, uterine hypoplasia, atrophy of the mammary glands may occur. These changes often cause infertility. In thyrotoxicosis, increased metabolic processes lead to excessive breakdown of





proteins and fats, as a result of which the patient's weight decreases, despite the fact that he eats more than usual. Violation of water and electrolyte exchange in the body (increased diuresis, thirst, strong sweating) leads to pancreatic dysfunction (hidden diabetes). During the development of the disease, "eye symptoms" appear one after the other in most patients.

The results of special tests show that in severe types of thyrotoxicosis, the metabolism of the main substance can increase by 60-70%, and in some cases 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 (echt), leukopenia, lymphocytosis, a decrease in the amount of hemoglobin and erythrocytes is detected in the blood.

### **CONCLUSION**

In the mild form of thyrotoxicosis, neurological symptoms are not expressed (getting 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's weight may decrease up to 10%. Usually, in the afternoon, the patient's ability to work is reduced. Metabolism of the main substance does not exceed 30%. Moderate thyrotoxicosis - direct disturbances of the central nervous system (irritability, irritability, moodiness, crying), tachycardia (100-120 beats per minute), systolic and It is manifested by an increase in diastolic blood pressure, an expansion of the heart's borders, the origin of heart failure (I degree according to Lang). The patient's weight decreases significantly, there are cases of weight loss despite good nutrition, and the ability to work decreases during the day. The process of metabolism of the main substance increases up to 60%. Severe type of thyrotoxicosis - in addition to disorders of the central nervous system of moderate severity typical of thyrotoxicosis, severe weakness in the muscle system, severe disorders in the cardiovascular system, parenchymatosis a' dystrophic changes develop in the cells. Tachycardia deepens (more than 120 beats in 1 minute), arrhythmia occurs in most pulses, and heart failure (level II-III according to Lang). Metabolism of the main substance increases by 60% or more, the patient becomes extremely thin and his body weight decreases sharply. Capacity for work and abilities are completely lost in most patients.





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