

**CHANGES IN OTHER ORGANS DUE TO THYROID CHANGES**

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Abstract: *Hormonal disorders of the thyroid gland, which are part of endocrinological diseases, are accompanied by hair loss, brittle nails, obesity, weight loss, stress, infertility, memory loss, and eye problems. It is recommended to consume iodized table salt to prevent thyroid diseases. Modern diagnostic methods for endocrinological diseases are being developed in the regions by providing endocrinology dispensaries with the necessary reagents.*

Keywords: *Endocrinology, goiter, iodine deficiency, gland, hormone.*

Many people do not know that problems with the thyroid gland can be a serious threat to life. A visit to an endocrinologist is perceived as a formal event, less important than to other doctors, but many people change their attitude if they learn that the thyroid gland is an organ of great importance for the whole organism. A person's mood and even temperament can depend on its work. The thyroid gland produces hormones that are responsible for the intensity of metabolism, regulates the work of the cardiovascular system, gastrointestinal tract, mental and sexual activity. Usually, problems with the thyroid gland scare a person less than other health problems. But metabolism directly depends on the work of this organ.

Thyroid disease is a disease associated with the endocrine glands of humans and animals. The development of the thyroid gland begins in the fetal period, and in children by the age of 1 year its weight is 1-2 grams, and during growth it increases to 14-20 grams. It is formed in different ways in the human body and in the animal body. The thyroid gland develops from the epithelium of the embryonic gill sac.

The thyroid gland is fully formed and begins to secrete hormones at 8-9 months of human embryonic development. It is located in the neck, in the area of the



larynx, and consists of 2 lobes and a lobe. There are 6 health problems that can be caused by the thyroid gland, which we will list one by one.

1. Weight changes: The metabolic rate also depends on the thyroid gland, and therefore the slightest change in its work is immediately noticeable. If the thyroid gland is overactive, there can be sudden and significant weight loss with little or no effort. If, on the contrary, the gland secretes fewer hormones into the blood than usual, swelling begins and obesity occurs.

2. Feeling sleepy and tired: Do you suffer from working too much and not getting enough rest? Do you constantly feel sleepy and tired even with light work? Don't rush to conclusions: maybe all this is due to a malfunctioning thyroid gland.

3. Thermoregulation problems: feeling cold while everyone else is suffering from the heat, or, conversely, sweating in the cold season.

4. Menstrual irregularities and infertility: Women's reproductive health is directly related to the endocrine system, and the ability to conceive largely depends on the proper functioning of the thyroid gland.

5. Depression and anxiety: if the thyroid gland produces too much hormone, the overall rhythm of the body increases, the nervous system experiences stress, and irritability and anxiety are observed.

6. Skin and hair problems: two more important signs of hypothyroidism are hair loss and dry skin. You should be especially careful not to encounter this symptom in the summer. The fact is that with metabolism, sweating also decreases, as a result of which the skin becomes less moisturized, dries out and even dehydrates faster¹ The thyroid gland is supplied with blood by a pair of upper and a pair of lower arteries, and is innervated by sympathetic and parasympathetic nerve fibers. It produces the iodine hormones thyroxine, triiodothyronine and thyrocalcitonin, which are involved in the regulation of substance and energy metabolism in the body.

When it comes to endocrine diseases, goiter comes to mind in the minds of humanity today. Goiter is an iodine deficiency, which is characterized by an enlargement of the gland. Iodine deficiency is caused by a number of things, such as environmental changes in a person's lifestyle, stress, and environmental factors. As a



result of iodine deficiency, memory loss, hair loss, short stature, brittle nails, and in some cases, weight loss occur. Hormone synthesis is disrupted. Due to the above symptoms, the heartbeat accelerates or slows down, and blood pressure changes from normal. Another main symptom is shortness of breath and rapid pulse. In order to prevent diseases, many preventive measures are being carried out in Uzbekistan and among the population. Iodine deficiency is observed in the diet of various regions of our republic. Resolution of the President of the Republic of Uzbekistan No. PQ102 dated 26.01.2022 On measures to improve and expand the scope of the Endocrinology Service². According to this resolution, new standards of diagnostics and treatment were approved within the framework of the national program for providing endocrinological care to the population of the Republic of Uzbekistan. About 75 thousand patients were provided with 100% free insulin on the basis of the state budget. The average daily iodine intake by citizens has significantly decreased, and the amount of iodine is 32-64 mcg. This means that the minimum amount is 150-200 mcg.

According to the World Health Organization on Endocrinological Diseases, if the incidence of sporadic goiter is reduced by 5%, iodine deficiency diseases will be eliminated. Currently, the prevalence of iodine deficiency is 31%, and in 2020 it decreased by more than 2.5 times. By 2022, it will be 2%. Not only researchers, but also a group of medical workers are struggling with this issue. Treatment. The only treatment method is to remove parathyroid adenomas. Hypoparathyroidism. A disease or condition associated with parathyroid hormone deficiency. The causes of hypoparathyroidism are inflammatory diseases of the parathyroid glands, hemorrhage during injury, congenital defects of the thyroid gland, its accidental removal or injury. Clinic and diagnosis. Hypoparathyroidism is accompanied by convulsive attacks. Convulsions are clonic in nature, occur mainly in the facial muscles and involve symmetrical muscle groups. The convulsion is accompanied by abdominal pain due to spasm of the abdominal wall muscles and smooth muscles of the abdomen. Laryngospasm is possible, asphyxia may occur. It is characterized by symptoms of Chvostek and Trusso.



Chvostek's symptom - when tapping with a finger or percussion hammer in front of the earlobe in the area of the projection of the facial nerve, the muscles in the area of the bridge of the nose and the corner of the mouth contract. Trousseau's symptom - when pressing on the area of the neurovascular bundle in the armpit, the palm of the hand becomes tonic stiff in the form of a "midwife's hand" sign, a distinctive sign. It should be differentiated from epileptic seizures. Our conclusion is that these are the symptoms of endocrine system diseases, the endocrine system plays a very important role in regulating almost all vital processes in the human body. The endocrine glands produce hormones, the disruption of this process leads to serious diseases. Many people are indifferent to changes in the body in the initial period or do not consult a doctor, attributing it to fatigue, stress and other circumstances. It is necessary to consult an endocrinologist before the disease worsens, and to treat and prevent negative consequences in the initial period.

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