

The Scientific and Practical Study of Today's Important Disease Types

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Abstract. In the following scientific article, What is endocrinology? And what diseases are studied in this field? We will get acquainted with the scientific analysis of diabetes mellitus, one of the most common endocrinological diseases.

Key words: Diabetes, blood glucose level, insulin deficiency, treatment, plant, food, diagnosis.

Endocrinology is the science of the structure and activity of endocrine glands, the substances produced by them – hormones, and their role in the human body; as well as about disorders of these glands or diseases caused by the effects of these hormones.

An endocrinologist diagnoses and treats diseases of the endocrine glands: pituitary, pancreas, thyroid, parathyroid and endocrine male and female sex glands. These diseases are widespread and frequent, many of them have been in a suppressed form for a long time. Endocrine pathology affects the functions of other organs, aggravates the condition of other diseases and causes great damage to health.

What diseases does an endocrinologist treat?

- Diseases of the hypothalamus-pituitary system (hormonally active and inactive pituitary adenomas, empty Turkish saddle syndrome, acromegaly, hyperprolactinemia, diabetes insipidus, somatotropic deficiency).
- Diabetes mellitus 1 and 2 types and its complications.
- Obesity and metabolic syndrome, prediabetes.
- Diseases associated with disorders of the functions and structure of the thyroid gland (diffuse goiter, thyroiditis, nodular forms of goiter, hypothyroidism and thyrotoxicosis syndromes).
- Parathyroid gland pathology (hyperparathyroidism, hypoparathyroidism).
- Osteoporosis (both women and men).
- Adrenal gland diseases (hormonally active and inactive formations, hypercortisolism syndrome, adrenal insufficiency, congenital dysfunction of the adrenal cortex)

- Hormone-related diseases of the gonads (climacteric syndrome, various functions of menstruation, polycystic ovary syndrome, endocrine infertility).

In this scientific article, we will consider one of the endocrinological diseases, diabetes mellitus.

Since ancient times, people have been using parts of various plants for the treatment of diseases. 38-40 percent of the medicinal products used in the medicine of Uzbekistan are preparations obtained from plants. The synthesis of some important medicinal preparations used in the treatment of some serious diseases is a complex process.

Due to malfunctions in the body with diabetes, tissues cannot receive enough energy.

If the glucose level is maintained for a long time, the blood begins to thicken.

It loses the ability to pass through small blood vessels, which affects the work of all organs. Therefore, the first task is to return blood sugar to normal as soon as possible.

The minimum values of glucose in the blood can be determined when a person is in the stomach, that is, on an empty stomach. During the assimilation of food, nutrients are transferred to the blood, which leads to an increase in the percentage of sugar in the plasma after a meal.

Diabetes is a disease caused by insulin deficiency and metabolic disorders in the body. Diabetes has been known for a long time in the history of eastern folk medicine. Abu Ali ibn Sina pays special attention to this pain. «Water comes out the way it was drunk,» he wrote. If the patient drinks a lot of water, it causes other diseases and the patient becomes very thin.

According to the International Health Organization, more than 420 million people in the world have diabetes. This is 25% more than 40 years ago.

The norm of glucose for adults is 3, 3-5, 5 units of the norm for the material taken from the capillary. The norm for blood taken from a vein is 3.7 to 6.1. The most common symptoms of low blood sugar are:

Dizziness

Confusion

Anger

Getting nervous

Anxiety

Sweat

Fast heart rate

Fainting

Hypoglycemia occurs when blood glucose levels fall too low. Low blood sugar can be caused by many things, including various types of diabetes, certain medications, alcohol, endocrine disorders, eating disorders, pregnancy, and liver, kidney, or heart disease.

If the level of glucose in the blood is high for a long time, the following symptoms can be observed in patients:

Slow healing of injuries or wounds;

Dark spots on the skin;

Leg pain;

In addition to the above-mentioned general symptoms, women with diabetes may also experience symptoms such as dry and itchy skin, urinary tract infections, and fungal infections.

The pancreas is an odd organ, located below the stomach behind the peritoneum, near the descending part of the duodenum. The mass of an adult's pancreas is 70 – 80 g and its length is 12 – 18 cm. The internal secretory part of the gland is located in the islets of Langerhans, which makes up 1.5% of the gland. In the islets of Langerhans, there are alpha cells that produce glucagon, and beta cells that produce insulin. Tumors can appear in these cells. The functions of beta cells are to maintain energy homeostasis in the body. The energy receptors of these cells sense minimal changes in caloric molecules (glucose, amino acids, ketone bodies, fatty acids) in the blood. Insulin performs the absorption, metabolism and accumulation of nutrients entering the body. It participates in growth, development, tissue formation, has an anabolic and anti-catabolic effect on carbohydrates, fats and amino acids.

It is known that in modern medicine, in the treatment of diabetes mellitus, it is prescribed to take dozens of chemical compounds, such as manelin, amaryl, and insulin obtained by synthetic means. All these medicinal substances ensure the easy transfer of sugar from the blood to the cells, and in return, the amount of sugar in the blood and urine decreases. Reducing the amount of sugar in the blood with chemicals causes the insulin production of the pancreas to decrease even more. Long-term intake of chemicals leads to atrophy of the pancreas. As soon as chemical drugs are stopped, the blood sugar level increases. Therefore, in modern medicine, people with diabetes are advised to take medicines regularly. Medicines used in folk medicine activate the activity of the pancreas, which is aimed at reducing the amount of sugar in the blood by increasing the amount of insulin produced in the body. Therefore, when diabetes is treated with the help of folk medicine methods, it is possible to stop taking medicine after the pancreas function is restored.

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