

## IMMUNOHISTOCHEMICAL METHOD OF TREATING DIABETES WITH THE EFFECT OF MORPHOLOGICAL INDICATORS ON THE ORGANISM OF EXPERIMENTAL ANIMALS

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### Abstract

This article is written about the study of the effect of diabetes on the organism of experimental animals by the immunohistochemically method of its effect on morphological indicators. The article is mainly written about the causes of diabetes mellitus and the fight against diabetes mellitus.

**Keywords:** origin of sugar, different levels, metabolism, indicators, immunohistochemically, hormone Insulin

## ИММУНОГИСТОХИМИЧЕСКИЙ СПОСОБ ЛЕЧЕНИЯ САХАРНОГО ДИАБЕТА С ВОЗДЕЙСТВИЕМ МОРФОЛОГИЧЕСКИХ ПОКАЗАТЕЛЕЙ НА ОРГАНИЗМ ЭКСПЕРИМЕНТАЛЬНЫХ ЖИВОТНЫХ

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### Аннотация

Данная статья написана об изучении влияния сахарного диабета на организм экспериментальных животных иммуногистохимическим методом его влияния на морфологические показатели. Статья в основном написана о причинах сахарного диабета и борьбе с сахарным диабетом.

**Ключевые слова:** происхождение сахара, различные уровни, метаболизм, показатели, иммуногистохимически, гормон инсулин.

### Introduction

Diabetes or sugar disease is a condition of impaired metabolism that is accompanied by changes in blood sugar levels.

The hormone Insulin serves to store sugar in the Blood, respectively, for use as energy or as a reserve. In diabetes, however, the body cannot produce enough of the same hormone insulin or use it effectively. As a result, the amount of sugar in the blood increases from the norm, various pathological conditions occur in the eyes, kidneys, nerves and other important organs. [1, p.328]

In people with Type 1 diabetes, for various reasons, the insulin-producing cells in the pancreas do not produce insulin. Insulin cannot process glucose due to its lack in the body. As a result, the glucose in your food cannot penetrate the cells. This leads to an increase in blood glucose levels. High blood sugar levels, on the other hand, can cause short-term and long-term problems. In Type 2 diabetes mellitus, the sensitivity of the corresponding cells in the body to insulin decreases, and even with sufficient insulin production, there is a problem with the introduction of glucose into the cells in the blood. As a result, the amount of sugar in the blood remains high. This is the first of various problems in the body. If the disease is ignored during this period, it may also happen that the body does not produce enough insulin in its later stages. Uncontrolled

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type 2 diabetes causes high blood glucose levels to be maintained. The following are symptoms of Type 1 diabetes:

Starve fast;

Quick thirst;

Deterioration of vision;

Fatigue;

Frequent urination;

Drastic weight loss in a short time

Also, patients with complications of diabetes may develop ketoacidosis. Symptoms of this condition include the following. [2, p. 133]

Acceleration of breathing;

Dry skin and mouth;

Reddened face;

Bad breath coming;

Nausea;

Vomiting or stomach pain

If you have one or more symptoms of diabetes, you should visit a doctor. But if you have symptoms of ketoacidosis, it is imperative that you seek medical help immediately. Ketoacidosis is a condition in which emergency medical care is a must.

Type 2 diabetes develops slowly in the body. Accordingly, the first symptoms can also be in a subconscious, hidden state. Type 2 diabetes mellitus is manifested by the following symptoms:

Constant feeling of hunger;

Lack of energy;

Constant feeling of fatigue;

Quick thirst;

Frequent urination;

Mouth drying;

Blurred vision.

As the disease progresses, the symptoms get worse again and life-threatening signs can also be observed.

If the blood glucose level is high for a long time, patients may experience the following symptoms:

Slow healing of wounds or ulcers;

Dark spots on the skin;

Leg pain.

If you notice two or more of these hidden symptoms or signs of concussion in yourself, see a doctor. Leaving this type of diabetes uncontrolled causes life-threatening conditions to occur.[3, p. 84]

The causes of the origin of sugar disease vary according to their type. There is currently no exact data on how Type 1 sugar disease originates. But there are opinions that this

can be caused by an autoimmune reaction that occurs in the body. The human immune system produces insulin in the pancreas, as a result of attacking beta cells, which disables it and these cells fail to fulfill their main function.

In the origin of Type 2 diabetes, genetic and lifestyle are evaluated as important factors. Poor diet, sedentary work, obesity, the presence of people with diabetes in the family can affect the stagnation of cells in insulin. As a result, there is a significant increase in the amount of sugar in the blood.

Learn more about the rules of proper nutrition in diabetes, how to control your diet in detail through our guide: diabetes diet-schedules, recommendations and eating patterns

Symptoms of diabetes in men

In addition to common symptoms in men with diabetes, symptoms such as decreased sexual potency, erectile dysfunction, and low overall muscle strength are also typical.

Symptoms of diabetes in women

In addition to the common symptoms highlighted above, in women with diabetes, symptoms such as dry skin and itching can be observed, as well as urinary tract infections, fungal diseases that often recur.

Complications of diabetes develop slowly in the body. When the patient does not control blood sugar levels, does not take the disease seriously, there is a high risk of developing serious complications. In the end, complications of diabetes can lead to deterioration in the quality of life, even disability.

Cardiovascular diseases. Sugar disease dramatically increases the risk of various cardiovascular problems, including ischemic heart disease, heart attack, and atherosclerosis. If the patient has diabetes, he is more likely to have heart disease or stroke.

Nerve damage (neuropathy). Excessive high sugar causes damage to the wall of small blood vessels (capillaries), especially the walls of small blood vessels that feed the legs, resulting in a disruption in the nutrition of nerve cells. This is manifested by various discomfort, pain, irritation and decreased sensation in three parts of the limbs and hands of the patient. And later this condition begins to be felt in the upper parts, in addition to the lower parts of the arms and legs.

If no treatment measures are taken, the sensation in the affected limbs can also disappear completely. Damage to the nerves associated with digestion, on the other hand, causes problems with nausea, vomiting, diarrhea or constipation. For men, this can lead to erectile dysfunction.

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