



TYPE II DIABETES MELLITUS CAUSES,SIGNS,SYMPTOMS,TREATMENTS AND MEDICATIONS OF ORIGIN

*Ashurov To'lqin Abdullayevich,
Abdug'aniyev Lutfullo Xayrullo o'g'li
Tashkent State Dental Institute*

Annotation: In the written article, you can find out about the reasons for the origin of the 2tip form of diabetes mellitus, the symptoms of the disease and the methods of its treatment, what medications are used in the disease. It is considered a disease that develops day by day.

Keywords: Polydipsia, polyuria, T2DM, SGLT2, metmorphin, kidney, liver, glucose.

Diabetes mellitus (popularly also called "saccharine disease") is a disease that occurs as a result of a violation of carbohydrate and water metabolism in the body. A violation of pancreatic function is a consequence. The pancreas produces the hormone insulin. Insulin participates in sugar processing. Without this hormone, the body cannot keep blood glucose levels in moderation and its amount increases. As a result, the body is observed to release excess glucose through the urine. Speciation of the disease is considered important, since the types of this disease are fundamentally different from each other in the initial period, and treatment is determined accordingly. The longer the disease persists, the more treatment methods will look like one-to-one. We will talk about Type 2 of this disease.

Signs and symptoms

The classic symptoms of diabetes are frequent urination (polyuria), increased thirst (polydipsia), increased hunger (polyphagia), and weight loss. Other symptoms that are usually present in the diagnosis include blurred vision, itching, peripheral neuropathy, repeated vaginal infections, and a history of fatigue. Other symptoms may include loss of taste. However, many people, for the first few years, do not have any symptoms and are diagnosed in regular tests. A small number of people with Type 2 diabetes may develop a hyperosmolar hyperglycemic condition (a condition of very high blood sugar associated with decreased levels of consciousness and low blood pressure).

Complications:

Complications of Diabetes Mellitus Type 2 diabetes is a chronic disease usually associated with a ten-year life expectancy. This is partly due to a number of complications associated with it, including: two to four times the risk of cardiovascular disease, including ischemic heart disease and stroke; 20 times the risk of lower leg amputations. In the developed world and increasingly elsewhere, type 2 diabetes is the biggest cause of rheumatic blindness and kidney failure. This is also associated with increased risk of cognitive dysfunction and dementia through disease processes such as Alzheimer's disease and vascular dementia. Other complications include skin hyperpigmentation (acanthosis nigricans), sexual dysfunction, diabetic ketoacidosis, and frequent infections. There is also a link between Type 2 diabetes and mild hearing loss. Hearing loss in diabetes is a form of hearing loss caused by Type 2 diabetes mellitus. Type 2 diabetes mellitus (T2DM) is associated with various microvascular and macrovascular complications. Microvascular

complications include diabetic retinopathy, neuropathy, and nephropathy, while macrovascular complications include cerebrovascular disease, peripheral vascular disease, and coronary heart disease. T2DM also affects other systems such as the liver and digestive systems, the musculoskeletal system, and can affect mental health and cognitive activity. These complications contribute significantly to the overall burden of the disease. An increase in the prevalence of T2dm is expected to increase the number of individuals experiencing these complications. In addition, similar pathophysiological mechanisms can lead to damage to the nervous system or blood vessels of the inner ear, resulting in impaired hearing. Many population-based studies have shown a significant correlation between T2DM and hearing loss, specifically sensorineural hearing loss. The Center for Disease Control and Prevention (CDC) recommends an initial assessment of hearing in a diagnosis of diabetes and a complete audiological assessment every two years thereafter. The American Speech-Language-Hearing Association and the World Health Organization guidelines for complex care for elderly people recommend providing adult screening and reinforcement. Among these complications, sensorineural hearing is noticeable, and its severity is associated with the development of T2DM. Hearing loss affects the quality of life, causing economic and emotional distress. It is an independent risk factor for dementia, cognitive decline, social withdrawal, anxiety, depression, and physical decline, especially in older adults. Both T2DM and hearing loss independently increase the risk of dementia. Diabetes was associated with hearing loss among patients with age, nephropathy, and neuropathy. Identifying high-risk individuals for complications such as hearing loss allows for early diagnosis and intervention. This article provides information on the relationship between hearing loss and diabetes and discusses screening guidelines and tools for diabetic patients.

Diet:

Calorie restriction is usually recommended for weight loss.

Several diets such as Dietary Approaches To Stop Hypertension (DASH), Mediterranean diets, low-fat diets, or observable carbohydrate diets such as low-carbohydrate diets can be effective. Other recommendations include the consumption of fruits, vegetables, saturated fat and low-fat dairy products to distribute calories and carbohydrates throughout the day, and the emphasis on the consumption of a person-adapted macronutrient. 2021 data showed that the consumption of tree nuts (nuts, almonds, and hazelnut) in people with diabetes mellitus, hunger reduced blood glucose. Microbiota-high consumption of good carbohydrates can help reduce the effects of t2d. Culturally relevant training can help people with Type 2 diabetes control their blood sugar levels for up to 24 months.

MEDICINES:

Blood sugar control

There are several classes of diabetes drugs. Metformin is generally recommended as a first-line treatment, as there is some evidence that it reduces mortality. However, this conclusion is being questioned. Metformin should not be used in people with severe kidney or liver problems. The American Diabetes Association and the European Association for the study of diabetes recommend the use of GLP-1 receptor agonist or SGLT2 inhibitor as a first-line treatment in patients with atherosclerotic cardiovascular disease, heart failure, or at increased risk, or kidney disease.

If metformin is insufficient after three months, a second oral agent of another class or insulin may be added. There are other classes of drugs: sulfanilureas, thiazolidinediones, dipeptidyl peptidase-4 inhibitors, SGLT2 inhibitors, and GLP-1 receptor agonists. A 2018 report found that DPP-4 inhibitors, rather than SGLT2 inhibitors and GLP-1 agonists, were associated with or without treatment for placebo-low mortality. Rosiglitazone, a thiazolidinedione, has not been found to improve long-term results even though it improves blood sugar levels. In addition, it is associated with increased heart disease and mortality.



Figure 1. Metformin tablet appearance.

Conclusion: it is necessary to remain more under the supervision of a doctor, since this disease is a quick rut. If the patient does not go to the doctor's examination, the disease may escalate. In this disease, the diet plays the main role. It can also be fatal if the disease is ignored in time.

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