Oybekova F.O - Andijan State Medical Institute

Assistant of the department of clinical pharmacology, pharmacology and medical biotechnology

## MODERN INTERPRETATIONS OF COMPLICATIONS OF NEPHROPATHY IN TYPE 2 DIABETES

Anotation: Due to the high prevalence of diabetes mellitus, there is an annual increase in the number of patients with diabetic nephropathy. And the complications of the progressive course of this high percentage of development of end-stage renal failure require clear approaches to early diagnosis, development of methods of prevention and timely treatment of the medical position. This review provides evidence-based recommendations for glucose-lowering therapy, control of arterial and proteinuria, hyperlipidemia, hyperglycemia depending on the level of albuminuria excretion and the severity of glucose-lowering drugs depending on the level of glomerular filtration rate. Individual goals for patient correction are determined. Specific application possibilities are indicated. The article emphasizes that glycemic control is a key factor in preventing the development of DN and the worsening of existing symptoms. Diabetic nephropathy is the most common cause of chronic renal failure in chronic kidney disease (CKD), requiring hemodialysis, accounting for more than 50% of all new cases of CKD.

**Key words:** Diabetic nephropathy, type 2 diabetes mellitus, glycemic control, microalbuminuria.

Diabetic nephropathy is a specific kidney damage in diabetes mellitus, accompanied by the development of nodular or diffuse glomerulosclerosis, the terminal stage of which is characterized by the development of chronic renal failure (CRF). The basic principles of DN prevention are the correction of carbohydrate metabolism, blood pressure (BP), and lipid metabolism. The first clinical manifestation of diabetic nephropathy is transient proteinuria, which usually occurs during exercise or orthostasis. It then becomes constant at normal or slightly reduced glomerular filtration rate. Prevention of DN is a complex task, including various types of specific therapy: hypoglycemic, antihypertensive, lipid-lowering, antithrombic, etc. Thus, there is currently quite convincing evidence that the basic pathophysiological mechanisms leading to the development and progression of DN are the same in both types of diabetes. However, in type 2 diabetes, additional damage factors have been identified, such as obesity, dyslipidemia, hyperuricemia, which contribute to the formation of DN, which is the leading cause of end-stage renal failure. Normalization of carbohydrate metabolism is ensured by choosing an intensified insulin therapy regimen, which imitates the physiological secretion of insulin in healthy people: administration of short-acting insulin before each meal and long-acting insulin once or twice a day. In addition to drug treatment, an important role in Diet, exercise and weight control play a role in preventing diabetes complications. Diabetes is a lifelong disease, but with proper care, people suffering from it can remain healthy and live long lives without complications. Diet is the main and mandatory component of a preventive set of measures for any clinical and pathogenetic forms of diabetes mellitus. The basic principles of diet therapy are to limit or eliminate the diet of easily digestible carbohydrates, provide the patient's body with physiological amounts of proteins, fats, carbohydrates, and vitamins to maintain ideal body weight, maximize compensation for carbohydrates and other types of H metabolism, and preserve the ability of patients to work. Most researchers are inclined to the advisability of limiting protein intake to 1.0 g/kg/day for DN at the stage of microalbuminuria, chronic kidney disease (CKD) stages 1-3; up to 0.8 g/kg/day for proteinuria, CKD

stages 1-4. It is advisable to partially replace animal proteins with plant proteins. The facts presented in the review can be considered as a starting point for correcting metabolic processes in the kidney and body in diabetes mellitus.

## **LITERATURE**

- 1. Turakulova Y.Kh. Clinical guidelines for the treatment of type 2 diabetes mellitus 2019.
- 2. Dedov I.I., Melnichenko G.A., Fadeev V.V. Endocr textbook 2020
- 3. apoptosis processes in the progression of chronic kidney disease in children, nephrology and dialysis. 2013; 15 (2): 135-9.