MODERN PHARMACOTHERAPY OF TYPE 1 DIABETES MELLITUS

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Introduction. Every 1 out of 30 Ukrainians suffers from diabetes mellitus (DM). Diabetes mellitus (DM) is an endocrine disease characterized by chronic hyperglycaemia caused by insulin secretion disorders or its full insufficiency. There are carbohydrate, lipid and protein metabolism disorders related to DM, due to abnormal insulin impact in target tissues, which results in lifethreatening complications. Effective glycemic level control is to provide prevention of DM complications development and improve life quality of a DM patient.

Aim. Analysis and research of ukrainian and foreign recommendations regarding complex pharmacotherapy of type 1 DM aimed at achieving normoglycemia.

Materials and methods. We have compared ukrainian Unified clinical protocol for primary, emergency, secondary (specialized) and tertiary (highly specialized) care: Type 1 diabetes in young people and adults with similar recommendations from NICE, SIGN i ADA.

Results. Purpose of type 1 DM pharmacotherapy is obtaining the targeted level of glycated haemoglobin less than 7,0% in adults with preprandial blood glucose level 4.5-7.5 mmol/l and less than 7,5% in children. In patients with repetitive episodes of severe hypoglycaemia, cardiovascular diseases, neglected complications, psychoactive substance abuse or untreated mental illnesses level of glycated haemoglobin is tolerated to be less than 8% and preprandial blood glucose level 5.5-8.5 mmol/l. Main goals in type 1 DM patients' treatment are lifelong insulin therapy, nutrition therapy, physical activity in moderation, rejection of bad habits, self-control of blood glucose and learning.

A whole variety of innovational insulin drugs was created to gain control over type 1 DM. FDA recommends rapid-acting inhalation powder insulin Afrezza, which proved to be effective in lowering glycated haemoglobin not only in DM type 1, but also DM type 2. In 2017 there was also recommended fast-acting insulin aspart Fiasp for treatment in adults – a combination of insulin aspart with vitamin B3 and amino acid L-arginine. Such combination was intended for faster initial absorption of insulin. A new form and dose of prolonged insulin glargine in the form of a Toujeo Max SoloStar insulin syringe pen was later approved. In order to maintain basal insulin levels more effectively, an ultralong-acting insulin degludec (Tresiba), which has a duration of action more than 42 hours, has been approved. It is indicated for type 1 and type 2 diabetes.

Conclusions. Thus, substitution pharmacotherapy of type 1 DM can provide normoglycemia, normalization of lipid metabolism and prevention of complications. The development of new forms and doses of insulin helps to increase compliance in patients with the disease.

MODERN PHARMACOTHERAPY OF URTICARIA AND ANGIOEDEMA

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Introduction. Everyone nowadays has heard of an allergic reaction of the body. Estimating the data for 2020 about 40% of the population of our planet has some allergy. Some part of allergic reactions are immediate. The best known of these are acute urticaria and angioneurotic edema.