ORAL ANTIDIABETIC DRUGS

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Type 2 diabetes is a global public health concern, its prevalence in Europe, especially Ukraine, rising every year. Type 2 diabetes mellitus is a progressive and complex disorder that is difficult to treat effectively in the long term. The majority of patients are overweight or obese at diagnosis and will be unable to achieve or sustain near normoglycaemia without oral antidiabetic agents; a sizeable proportion of patients will eventually require insulin therapy to maintain long-term glycaemic control, either as monotherapy or in conjunction with oral antidiabetic therapy. Drugs used in diabetes treat diabetes mellitus by lowering glucose levels in the blood. With the exceptions of insulin, all are administered orally. There are different classes of anti-diabetic drugs, and their selection depends on the nature of the diabetes, age and situation of the person, as well as other factors. Diabetes mellitus type 2 is a disease of insulin resistance by cells. Type 2 diabetes mellitus is the most common type of diabetes. Treatments include agents that increase the amount of insulin secreted by the pancreas, agents that increase the sensitivity of target organs to insulin, and agents that decrease the rate at which glucose is absorbed from the gastrointestinal tract. The main classes are heterogeneous in their modes of action, safety profiles and tolerability. These main classes include agents that stimulate insulin secretion (sulphonylureas and rapid-acting secretagogues), reduce hepatic glucose production (biguanides), delay digestion and absorption of intestinal carbohydrate (alpha-glucosidase inhibitors) or improve insulin action (thiazolidinediones). Today proved the benefits of intensified glycaemic control on microvascular complications in newly diagnosed patients with type 2 diabetes. The most promising direction control hyperglycemia yalyaetsya use of complex oral antidiabetic drugs. The recent clinical trial Steno-2 Study showed that intensive target-driven, multifactorial approach to management, based around a sulphonylurea, reduced the risk of both micro- and macrovascular complications in high-risk patients. The insulin-sensitising thiazolidinedione class of antidiabetic agents has potentially advantageous effects on multiple components of the metabolic syndrome; the results of clinical trials with cardiovascular endpoints are awaited. Combinations of certain agents, for example a secretagogue plus a biguanide or a thiazolidinedione, are logical and widely used, and combination preparations are now available in some countries. Clinically effective are combination metformin added to a sulphonylurea. Promising direction of diabetes therapy is to create a comprehensive anti-diabetic drugs.