

Bactics optimization of the diabetes mellitus of the second type combined with obesity considering genetic, gender, age and hormonal and metabolic disorders

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Today, diseases such as diabetes and obesity pandemic took nature spread, affecting any - that sections of the population regardless of age, sex, social status, race and ethnicity. If in 2010 the number of cases in the world amounted to 285 mln., In 2014 recorded 387 million people. Every twelfth inhabitant of the planet has diabetes, in 46.3% of cases of diabetes it is not diagnosed, i.e. 1 of 2 people did not know about the disease. About half of the people who died of diabetes in 2013 were younger than 60 years. Despite numerous diabetic activity of associations, medical research programs implemented to eliminate diabetes, according to experts of the International Diabetes Association (IDF) in 2013, the world struggle with diabetes was considered lost. The study examined obesity and type 2 diabetes as a single pathological process, which helped to improve treatment in patients considering genetic, gender, age and hormonal and metabolic disorders. Today adipose tissue is positioned as endocrine organ, since in addition to the secretion of free fatty acids (FFA), it produces proteins with multiple autocrine, paracrine and endocrine functions, designated as adipokines/ adipocytokines. The substance has such biological effects as absorption and regulation of energy expenditure, regulation of glucose metabolism and lipid and anti-inflammatory properties. To study the relationship of these processes and determine genetic specificity in patients with type 2 diabetes on a background of obesity studied gene polymorphism (GPX1).