



DIABETES MELLITUS IN CENTRAL ASIA: PROBLEMS AND SOLUTIONS

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Resume: The relevance of diabetes mellitus (DM) is determined by an exceptionally rapid increase in morbidity. It is quite obvious that the experts' forecast that the number of diabetic patients will double over the next 12-15 years is justified.

Key words: diabetes mellitus, retinopathy, nephropathy. polyneuropathy, diabetic foot syndrome

In the structure of diabetes mellitus, 80-90% are usually patients with type II diabetes, and only some ethnic groups of different countries are exceptions. The indicators reflect the state of morbidity by treatment, i.e. when patients were forced to seek help. In the absence of medical examination, active identification of patients, the bulk of those suffering from INSD remains unaccounted for. People with glycemia from 7 to 15 mmol/ l (norm 3.3 - 5.5 mmol/l) live and work, of course, having characteristic symptom complexes. they do not go to the doctor, they remain unaccounted for. They make up that underwater part of diabetes - the "iceberg", which constantly "feeds" the surface, i.e. a smaller part of diabetic patients diagnosed with gangrene of the legs, coronary heart disease or brain disease, diabetic retinopathy, nephropathy. polyneuropathy, etc. Selective epidemiological studies have shown that in developed countries of the world, 3-4 people with a blood sugar level of 7-15 mmol/l, unaware of the disease, account for one patient who goes to the doctor. Similar studies conducted among the population have found the ratio of the actual and registered prevalence of INSD. Our data, especially in the age groups 30-39 and 40-49 years, completely coincide with those from abroad. In the initial treatment of patients with type I and II diabetes, we found an exceptionally high prevalence of late diabetic complications. It turned out that the frequency of complications identified by diabetologists is many times higher than the so-called "registered" frequency of complications. It's about those of them. which determine the disability and mortality of patients. These data are the basis for the organization of large-scale, or rather total, medical examination - screening for diabetes after the age of 40, to implement the principles of public health monitoring recommended by



WHO. Such preventive tactics are a real way of early detection of INSD and its complications and their prevention. Nowadays, during the initial treatment of a DM patient to a doctor, with a qualified examination, approximately 40% of cases reveal IHD, retinopathy, nephropathy, polyneuropathy, diabetic foot syndrome. Stopping the process at such a stage is much more difficult, if at all possible, and costs society much more.

The diabetological service should be ready to provide modern medicines and qualified care to many millions of DM patients in Central Asia.

The State Register of Patients with Diabetes mellitus should play a key role in studying the prevalence of diabetes, its infrastructure in various regions, cities, "megacities" and rural areas, northern and southern regions, depending on climatic and environmental conditions, food culture and many other factors.

Providing patients with medicines and controls The problem of providing diabetic patients with high-quality medicines and controls has always been and is quite acute everywhere, and there is an ongoing discussion about the choice of methods, on the one hand, affordable, and on the other - the most effective. From time to time, there is a heated discussion in our media about the priority of animal insulin, in particular, pork insulins, which are supposedly in no way inferior to human ones and cheaper than the latter. These, to put it mildly, incompetent by and large, are the direct lobbying of animal insulin manufacturers, which represent the yesterday of diabetology. The insulin of choice on the world market is generally recognized as human insulin, obtained using DNA recombinant technology. Its widespread introduction into practice, starting in 1982, eliminated all complications characteristic of animal analogues. Our long-term experience has shown that the need for insulin in patients with LSD. Those receiving human insulin were limited to a stable dose, while the dose of porcine monocomponent insulin increased by about half during the same period. The specific differences of insulins are known. Porcine insulin has increased immunogenicity, hence the antibody titer in patients with LSD. those who received human insulin during the year did not change, and those who received porcine insulin increased by more than 2 times. At the same time, changes in the immune status of DM patients receiving human INSULIN are especially demonstrative. An objective indicator of the state of the immune system is the determination of the immunoregulatory index (the ratio of T-helper inducers to T-suppressors - cytotoxic). In healthy individuals, it is 1.8 ± 0.3 . In patients with ischemic heart disease, those who received porcine insulin, it is below normal. 6 months after switching to human insulin treatment, this indicator reaches a normal



level. These data and numerous other facts about the advantages of human insulin over pork should always be an indisputable argument when purchasing human insulin. The pathogenesis of LSD and its late complications are based on complex mechanisms. Among them, disorders of the immune system play a leading role. Prescribing human insulin makes it easier to fight the disease, prescribing pig or other animal insulin makes the situation worse. So, human insulin is the drug of choice not only for children, adolescents, pregnant women, visually impaired people, diabetics with "diabetic foot", but today we must adhere to the following principle: all newly diagnosed patients with type I diabetes, regardless of age, should begin treatment with human insulin. It is no coincidence that the Federal program "Diabetes Mellitus" provides for the transition of all patients to human insulin treatment in 2000. Human insulin is not only the most effective treatment for diabetes, but also the prevention and late vascular complications. Human insulin, highly effective controls (glucose meters, strips) and means of insulin administration (pen syringes and penfills) have made it possible in the last decade to introduce the so-called intensive insulin therapy into practice. Controlled comparative studies by American scientists (DCCT) for 10 years have shown that intensive insulin therapy in patients with diabetes reduces the risk of developing proliferative retinopathy by 50-70% (, nephropathy - 40%, neuropathy - 80%, macroangiopathy - 40%; 7-10 times reduces the indicators of temporary disability, including the duration of inpatient treatment: prolongs work activity for at least 10 years. It is difficult to overestimate the moral and ethical aspects of intensive insulin therapy for patients with diabetes with the help of syringe pens and penfills. When on the pages of our media we encounter clumsy attempts to distribute syringe pens and penfills and lobbying of manufacturers of vials and conventional disposable syringes, we, defending the interests of patients, must fend off such "attacks" with universally recognized facts in the world, indicating that intensive insulin therapy with the help of forceps is the most effective and socially significant strategy in the treatment of patients with LSD. In patients with syringe pens with the appropriate insulin, vital interests practically coincide with those of a healthy person. A child, teenager, adult with diabetes can study, work, and fully live in a healthy person's regime, and not be "chained to the refrigerator" where vials of insulin are stored.

The most effective and economical direction in diabetology, as in any field of medicine, is prevention. There are 3 levels of prevention. Primary prevention involves the formation of risk groups for LSD or INSD and measures to prevent the development of the disease. Preventive measures are multifaceted, but for all their



diversity, the training of patients plays an exceptional role. In the near future, our collective management "School" is being published, where we consider various aspects of the organization of "schools" (centers) for the education of diabetics, various programs, training of newly diagnosed patients and training of patients for the prevention and/or treatment of complications, etc. Our 10-year experience in patient education has convincingly shown that it is impossible to achieve good and long-term results without training. The introduction of treatment and training programs for patients with diabetes into practice has a fantastic effect: the cost of maintaining and treating the patient is reduced by 4 times! At the same time, savings are made not only from funds aimed at the treatment of diabetes and its complications, but, very importantly, at the expense of indirect costs, i.e. due to prevention and, above all, complications, prevention of disability, mortality, requiring huge financial investments not only for medical rehabilitation, but also for social protection of patients and disabled people.

At the same time, it is appropriate to recall that a decrease in glycohemoglobin by only 1 g g reduces the risk of vascular complications by 2 times! The training of patients with hypertension led to the selection of more correct and effective antihypertensive therapy and after 6 months allowed to obtain a reliable steady decrease in systolic and diastolic blood pressure.

In conclusion, it should be recalled that solving the problems of diabetes, as well as any other case, depends on three main factors: ideas: people who are able and ready to implement these ideas: the material and technical base. There are ideas, moreover, there is a whole program; there are people (meaning specialists), but they are clearly not enough, a well-thought-out training system is required; finally, the material and technical base for organizing modern medical care for diabetics is extremely weak. Substantial investments are needed, first of all in the organization of the diabetological service of the country, which includes the construction of diabetological centers, schools, specialized departments equipped with modern equipment, personnel training, etc. Only in this case will we be able to reach the parameters set by WHO. and we will be able to implement, not declaratively, but essentially, the wonderful slogan: "Diabetes is not a disease, but just a special lifestyle." Our task is to work together, everyone in their place, in their region, to maximize the quality of life of diabetics.

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