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Body Weight and Obesity Prevention in IHD

Badritdinova M.N. Normurodov E. F.

Bukhara State Medical Institute

Abstract: One of the most significant risk factors for coronary artery disease is IHD. However, literature data on the role of a risk factor for coronary artery disease differ significantly. Meanwhile, in some cases, may precede the development , in a certain sense, it can be considered as a state of "predisease" in relation. Hyperglycemia, including latent, often occurs with hyperinsulinemia, which is considered one of the components of the "metabolic" syndrome, which plays an important role in the formation of cardiovascular diseases, including coronary artery disease..

Keywords: Arterial pressure, hyperlipidemia, obesity, diabetes mellitus..

Introduction

The epidemiological situation in relation to coronary heart disease (CHD) in various regions of the world and in individual contingents is very ambiguous. More than 1 million Americans have experienced new cases of coronary artery disease or an exacerbation of this disease (qualified as a myocardial infarction or death of coronary artery disease). Moreover, 650,000 of them had newly diagnosed coronary heart disease, and 350,000 had an exacerbation of chronic coronary artery disease. About 250,000 patients died before the hospital stage. Most of them had ventricular fibrillation. The value of the standardized indicator of the prevalence of coronary artery disease in different cities differed significantly. Thus, the highest value of this indicator was noted in Baku, Kyiv and Moscow (19.5%, 16.4% and 14.5%), and the lowest was in Nalchik (6.9%). In Tashkent, the prevalence of coronary artery disease was 9.3%. The most common among the surveyed contingents was angina pectoris (4.5%), somewhat less frequently (3.8%) there were "possible" ischemic changes on the ECG. Postponed myocardial infarction and without pain forms of coronary artery disease are even less common (respectively, in 1.3% and 1.5%), and a possible myocardial infarction in history (not confirmed by ECG changes) was determined in 1.0%. Factors contributing to an increase in sudden death, along with such generally recognized risk factors as high blood pressure, hyperlipidemia, obesity, diabetes mellitus, etc. also include painless myocardial ischemia [9] and untimely establishment (or failure to establish) the diagnosis [16]. In France, a 20-year study of the causes of death of the population was conducted, which showed a decrease in mortality from cardiovascular diseases (CVD) by more than 30% [8]. In this regard, the question of determining the range of risk factors for mortality from coronary artery disease and the development of adequate methods for the prevention of this disease is of particular importance. The summary data of studies conducted in three regions of France, in two regions of Italy, in two regions of Sweden, Barcelona, Belfast and Glasgow, covered the population aged 35-64 years [10]. The authors came to the conclusion that the mortality rates of the population are influenced by both geographical location and lifestyle, diet and other factors. At the same time, it was shown that one of the most important factors

in the increase in mortality from coronary artery disease is a very low coverage of treatment for both patients suffering from coronary artery disease and those with high blood pressure. The summary data of studies conducted in three regions of France, in two regions of Italy, in two regions of Sweden, Barcelona, Belfast and Glasgow, covered the population aged 35-64 years [10]. The authors came to the conclusion that the mortality rates of the population are influenced by both geographical location and lifestyle, diet and other factors. At the same time, it was shown that one of the most important factors in the increase in mortality from coronary artery disease is a very low coverage of treatment for both patients suffering from coronary artery disease and those with high blood pressure. The summary data of studies conducted in three regions of France, in two regions of Italy, in two regions of Sweden, Barcelona, Belfast and Glasgow, covered the population aged 35-64 years [10]. The authors came to the conclusion that the mortality rates of the population are influenced by both geographical location and lifestyle, diet and other factors. At the same time, it was shown that one of the most important factors in the increase in mortality from coronary artery disease is a very low coverage of treatment for both patients suffering from coronary artery disease and those with high blood pressure. diet and other factors. At the same time, it was shown that one of the most important factors in the increase in mortality from coronary artery disease is a very low coverage of treatment for both patients suffering from coronary artery disease and those with high blood pressure. diet and other factors. At the same time, it was shown that one of the most important factors in the increase in mortality from coronary artery disease is a very low coverage of treatment for both patients suffering from coronary artery disease and those with high blood pressure. In the presence of hypertension due to SAD, the risk of death from CVD increases by 5 times, and due to DBP by 3 times. This study showed that with an increase in blood pressure, the risk of myocardial infarction and cerebral stroke increases, and the risk of cerebral stroke increases more intensively [104]. Its growth should be noted not only among the urban, but also among the rural population. A study of the structure of mortality in Tashkent showed that CVDs are the cause of death for men aged 20-59 years in 33.1% of cases (IHD - 23.87%, GB - 7.16%, other CVDs - 2.06%) [11].

The increase in overall mortality rates from 9.6 to 24.1 cases per 1000 people / year as diastolic blood pressure increases is shown by the data of B.Kh. [8]. According to his own data, mortality from CVD in the group of examined AH was 5 times higher, in the group of borderline AH - 1.8 times higher than in the group with normal BP. Prospective observations of the male population in Bishkek showed that overall mortality from CVD and other causes increases significantly with the growth of SBP [11].

In Russia in 1995, for the first time since 1986, a decline in mortality was recorded, and its decrease was noted in 70 regions of the country [9], which was the result of a significant reduction in mortality from diseases of the circulatory system and unnatural causes of death - accidents, poisoning and injuries. At the same time, it was noted that the level of maternal mortality remains high and does not decrease. The maternal mortality rate in Russia is 5-10 times higher than in developed Western European countries.

According to the data, cardiovascular diseases are one of the main causes of mortality in the population of Moscow, accounting for 57% of total mortality, which exceeds similar indicators in Russia as a whole. A study of the structure of mortality in Tashkent revealed that CVD is the cause of death in 37.5% of cases [9,10]. According to [11], there is an increase in mortality from CVD in the female population in all age groups, starting from 30-39 years. Cardiovascular diseases also occupy the first place in the structure of extragenital pathology, which is one of the main causes of death in pregnant women [10].

Based on the data presented in this section, we can conclude that hypertension is of great importance in the formation of coronary artery disease, stroke and mortality from them. Timely

detection, treatment and prevention of hypertension significantly reduces the risk of death from CVD. At present, a lot of work is being done in Uzbekistan to improve the health of women of childbearing age, which is of decisive importance in the formation of a healthy generation.

From the information given in the previous chapter, it follows that, according to most studies, the significance of DM as a risk factor for coronary artery disease can be considered proven. At the same time, there is no consensus in the literature regarding the significance of IGT as a risk factor for the development of coronary artery disease and mortality from it.

According to a number of studies, IGT significantly increases the risk of developing arterial sclerosis [15, 16]. A long-term prospective observation that lasted 26 years in Framingham (USA) covered 1672 men and 2264 women [16]. After 26 years, 210 men and 199 women developed CAD. Among individuals with IGT, along with coronary vascular disease, peripheral vascular disease (primarily the femoral artery) also occurred. The authors concluded that under conditions of hyperglycemia among individuals with peripheral vascular disease, there is a high risk of developing coronary artery disease. Apparently, the combination of damage to the coronary and peripheral arteries is the cause of hemodynamic disturbances and the formation of a hypokinetic type of blood circulation [11].

There are reports in the literature that IGT significantly affects the severity and clinical course of coronary artery disease [12]. Among people with IGT suffering from coronary artery disease, repeated, frequent hospitalizations, tachycardia, and ischemic ECG changes are much more common [15]. Over time, the level of glycemia can change both towards an increase in the indicators of the glycemic curve, and towards a decrease, and in other cases, the level of glycemia stabilizes. In Tashkent, a study was made of the prevalence of coronary artery disease and the levels of basal insulinemia among individuals with different dynamics of the course of IGT [14]. It turned out that the development and severity of IHD are closely related not only to the presence of IGT, but also to the dynamics of hyperglycemic conditions. Thus, among individuals with initial IGT, with normalization of the level of glycemia, the frequency of coronary artery disease is 25%, and with stabilization of IGT, the frequency of coronary artery disease reaches 76.5%. At the same time, the level of basal insulinemia increases according to the progression of hyperglycemia. Among individuals in whom hyperglycemia returned to normal, the level of basal insulinemia was 18.27±0.92 mcU/ml, with the transition of IGT to overt DM, the insulin content was more than 2 times higher (39.08±2.1 μU/ml), and with stabilization of IGT, basal insulinemia was the highest - 44.56±3.32 μU/ml. During the entire follow-up period, 864 people developed coronary artery disease and 384 people died from this disease.

Along with works that show the important role of IGT in the formation of coronary artery disease and mortality from it, there are data in the literature that deny the role of IGT as a risk factor for coronary artery disease. Multivariate analysis, taking into account age, sex, education, hypertension, height-weight index and smoking, allowed the authors to conclude that, in contrast to DM, IGT is not a risk factor for CAD. One of the largest works devoted to the study of the significance of IGT in the formation of coronary artery disease and deaths in this disease is a cooperative study conducted by The International Collaborative Group in 14 research centers in 11 countries [15]. The studies were carried out in Australia, England, Denmark (2 populations: men aged 40 and 50), Ireland, USA (2 populations: employees of the gas company and the Western Electric Company), Italy, Switzerland, Scotland, Finland (2 populations: policemen and unorganized population), France, Japan [16]. We took into account such indicators as the prevalence of coronary artery disease, the presence of ischemic changes on the ECG, cases of myocardial infarction and mortality from coronary artery disease among individuals with IGT and various levels of blood glucose. The results obtained were very ambiguous. Data from studies among policemen in Finland,

employees in Italy, workers in Japan showed that coronary artery disease among people with IGT occurs significantly more often than among people with normal glucose tolerance. A positive relationship between ischemic changes on the ECG and the presence of IGT was found in the populations of Australia, Italy, the unorganized population of Finland, and France. A higher mortality from coronary artery disease was found among people with IGT in the population of the US Gas Campaign, France and Finnish policemen. However, among those surveyed in England, Denmark, Switzerland and Scotland found no relationship between the presence of IGT and the prevalence of coronary artery disease. As follows from these data, the results of studies of different centers differ significantly.

Large population studies conducted by the Cardiology Center of the Ministry of Health of the Republic of Uzbekistan indicate the importance and rather high efficiency of preventive measures in relation to cardiovascular diseases [3, 2, 15]. Preventive programs implemented in production teams made it possible to increase the effectiveness of drug control of hypertension by 7 times, reduce the incidence of hypertension by 10%, and up to 25% of men stopped smoking [2]. Multifactorial prophylaxis has generally proven to be effective in both men and women [3]. However, it should be noted that the effectiveness of preventing hypertension and smoking was more pronounced among men than among women. Among men aged 30-59 years in Samarkand, the incidence of coronary artery disease with normal blood pressure was 3.4%, with borderline hypertension - 7.5%, and with hypertension - 16.7%, respectively [3,4].±2.36 years, it was shown that HDL-C has a stabilizing effect on atherosclerotic plaque and has a positive effect on the course of coronary artery disease, and also prevents the development of MI to a certain extent [9]. Dyslipoproteinemia in some cases may be a manifestation of a common hereditary syndrome. In persons with a hereditary burden of cardiovascular diseases, AH was significantly more common among persons with dyslipoproteinemia than with normolipidemia (20.2% and 12.5%, respectively). At the same time, the authors support the view that excessive fat intake contributes to an increase in blood cholesterol, and this, in turn, leads to an increased risk of developing coronary artery disease. Of the dynamics of the development of coronary artery disease among people with IGT in "cross-cutting" contingents. Based on the foregoing, further study of the role of IGT in the formation of coronary artery disease and outcomes in this disease is of particular interest.

Literature used:

1. Abdukhakimova N.A. Features of the clinical course of gout in metabolic syndrome // Ph.D. diss. Tashkent, 2011, p. 152.
2. Akbarova M., Mamasoliev N.S. Epidemiological, clinical, biorhythmological and preventive aspects of chronic heart failure in the harsh continental climate of the Fergana Valley / V-Congress of Cardiologists of the CIS countries in the journal Cardiology of the CIS. 2005 v.-3, No. 2 Art. 17.
3. Tursunov Kh.Kh., Babich S.M. Features of the course of coronary artery disease in a sharply continental climate of the Fergana Valley of Uzbekistan // Modern problems of science and education. - 2008. - No. 3 - S. 31-34
4. Kamilova U.K., Rasulova Z.D. To study the comparative effectiveness of the action of losartan and lisinopril on glomerulo-tubular markers of kidney dysfunction in patients with chronic heart failure. Cardiovascular therapy and prevention. 2015;14(2):41-45. https://doi.org/10.15829/1728-8800-2015-2-41-45
5. Shagazatova B.Kh., Assessment of the quality of outpatient monitoring of patients with diabetes mellitus // Medical business, 2013.

6. American Diabetes Association. Prevention or delay of type 2 diabetes. Diabetes Care. 2017;40 (Suppl 1): S44–S47.
7. Aspry KE, Van Horn L, Carson JAS, et al.: Medical Nutrition Education, Training, and Competencies to Advance Guideline-Based Diet Counseling by Physicians: A Science Advisory from the American Heart Association. circulation. 2018;137(23): e821–e841. 10.1161/CIR.0000000000000563.
8. Barrett-Connor E, Khaw KT. Diabetes mellitus: an independent risk factor for stroke? Am J Epidemiol 1988; 128:116-23. 10.1093/oxfordjournals.aje.a114934
9. Stumvoll M, Goldstein BJ, van Haeften TW. Type 2 diabetes: principles of pathogenesis and therapy. Lancet. 2005;365(9467):1333–46.
10. Frd, ES, Giles, WH & Dietz, WH Prevalence the metabolic syndrome amng US adults: findings frm the third Natinal Health and Nutritin Examinatin Survey. JAMA 287, 356–359 (2002).
11. eleven. Teixeira TF, Alves RD, Moreira AP,Peluzio Mdo C. Main characteristics of metabolically obese normal weight and metabolically healthy obese phenotypes. Nutr Rev. 2015; 73:175-190.
12. Zinman B, Wanner C, Lachin JM, et al; EMPAREG OUTCOME Investigators. Empagliflozin, cardiovascular outcomes, and mortality in type 2 diabetes. N Engl J Med. 2015; 373:2117–2128.
13. Cusi K, Orsak B, Bril F, et al. Long-term pioglitazone treatment for patients with nonalcoholic steatohepatitis and prediabetes or type 2 diabetes mellitus: a randomized trial. Ann Intern Med. 2016; 165:305-315.
14. Kahn R, Buse J, Ferrannini E, Stern M. The metabolic syndrome: time for a critical appraisal. Joint statement from the American Diabetes Association and the European Association for the Study of diabetes. Diabetology. 2005;48(9):1684–99.
15. Grundy SM, Cleeman JI, Daniels SR, Donato KA, Eckel RH, Franklin BA, Gordon DJ, Krauss RM, Savage PJ, Smith SC Jr, et al. Diagnosis and management of the metabolic syndrome: An American Heart Association/National Heart, Lung, and Blood Institute scientific statement. circulation. 2005;112(17):2735–52.
16. Lu Y, Hajifathalian K, Ezzati M, et al. Metabolic mediators of the effects of body-mass index, overweight, and obesity on coronary heart disease and stroke: a pooled analysis of 97 prospective cohorts with 1 8 million participants. Lancet 2014; 383:970-83. 10.1016/S0140-6736(13)61836-X.