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## Problems Of Metabolic Syndrome and Its Components in The Modern World

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ABSTRACT

MS is a special problem as it is a combination of various risk factors and multiplies the likelihood of adverse outcomes; Isolation of MS aims to substantiate the need to start drug therapy even before the appearance of a specific pathology - hypertension, ischemic heart disease and diabetes mellitus-2; The concept of "metabolic syndrome" as a synonym for "risk factors" most fully meets the requirements of practical medicine.

**Keywords:** 

Arterial hypertension, metabolic risk factors, components of MS

Domestic researchers at the beginning of the XXI century logically argued that the main problems of the outpatient therapeutic service are associated with the lack of awareness of doctors about the metabolic syndrome. They pointed to the need to develop special preventive treatment programs for "Arterial hypertension" of its main component [Usmanov R.I. and Zueva E.B., 2008].

The syndrome is not a nosological concept, and therefore not etiological, but pathogenetic, and is a set of symptoms associated with a single pathogenesis [Usmanov R.I. and Zueva E.B., 2008].

According to WHO experts, the MS problem is also important due to the fact that the main cause of death from the cardiovascular continuum is precisely its main components - diabetes mellitus, arterial hypertension and metabolic risk factors.

Aslonova Sh.Zh. (2011) in her dissertation work also presented literature and her own similar data on the epidemiological characteristics of MS in the modern world, namely: 1) according to international recommendations, metabolic syndrome is

understood as a combination of many risk factors, according to most researchers, the main components of MS are: AH, IR in the form of CD-2 or NTG, BMI hyperlipidemia or obesity and, above all, abdominal obesity; 2) according to epidemiological studies, the frequency of MS in developed countries is 15-25%; 3) among people with MS, there is a very high mortality rate, and above all, mortality from CVD; 4) according to the data of various authors with MS, mortality from CVD is more than 20 times higher than without MS [Aslonova Sh.Zh., 2011].

In recent years, large-scale epidemiological studies have been carried out in our country under the leadership of a prominent scientist and major specialist in preventive medicine, Professor U.K. Kayumov, and quite a lot of experience has been accumulated in the screening, prevention and treatment of such components of MS as obesity, AH, DM, DLP, NTG, and IR [Kayumov U.K., Aslonova Sh.Zh. etc., 2009; Kayumov U.K., Sharipova N.D. et al., 2019; Tairov M., Sharipova N.D. et al., 2019; Tairov M., Sharipova N.D. et al., 2008; Egamberdieva D.A., 2019].

In recent decades, MS has attracted more and more attention from doctors of specialties: from cardiologists. gastroenterologists to general practitioners. This is due to a number of reasons. First of all, the widespread prevalence of MS, signs of which are present in every fifth in the general population [Hallword M., Watson I., 2010]. MS onset DM-2 precedes the of atherosclerosis, which are the main culprits of increased mortality among the population. And what is important, according to researchers from the Russian Federation (RF) E.B. Grishchenko. et al., (2016), MS is a reversible state. i.e. with appropriate treatment, it is possible to achieve, if not complete disappearance, then a significant decrease in the severity of its main manifestations [Grishchenko EB, Shchekina MI. et al., 2016]. These facts, also demonstrated by other researchers from near and far abroad. expand the possibilities of the doctor of first contact for the prevention and treatment of MS. "metabolic systemic complications" in adults and especially the elderly at the stage of primary, inpatient and post-inpatient health care [Chazova I .E., Mychka V.B., 2004; Alberti, K.G., 2009; American Diabetes Association Standards of Medical Care in Diabetes Care., 20091.

According to I.E. Chazova. (2004) and Beliakov N.N. et al. (2005) in Russia, in comparison with other countries, the prevalence of MS varies from 20 to 35%, in women it occurs 2.5 times more often and the number of patients grows with age [Chazova I.E., Mychka V. B., 2004; American Diabetes Association Standards of Medical Care in Diabetes Care., 2009].

In the NANHES III study, a wide, up to 23%, prevalence of MS was noted in the age group from 20 to 29 years. This figure increases significantly to a maximum of 44 and 42% at 60-69 years [HuG.Qiao O., Tuomilehto J., 2004].

In the above-mentioned study, Grishchenko E.B. et al. (2016) a meta-analysis of large-scale studies showed that in the adult population, MS is detected in 10-30% of the population, depending on its characteristics

and the criteria for the diagnosis of MS [Grishchenko E.B., Shchekina M.I. et al., 2016].

In the work of AmetovA.S., ChernikovaN.A. (2016) the obtained results showed that maintaining the state of normoglycemia for a long time contributes to a significant reduction in the risk of microvascular complications [Ametov A.S., Chernikova N.A., 2016].

In a study by IvashkinV.T. et al. (2010) found that an excessive level of postprandial glycemia has the most unfavorable prognostic value for the development of cardiovascular complications (CVC); an increase in glucose levels 2 hours after a meal is a more informative predictor cardiovascular of mortality (CVC) than fasting glycemia. The maximum mortality rate is observed at postprandial hyperglycemia values of more than 11.1 mmol / L, which can potentially reduce mortality in diabetes by 20-30% [Roitberg G.E., 2017]. These results are supported by the United Kingdom Prospective Diabetes Study (UKPDS). So, according to the results of this largest international study on glvcemic control UKPDS, an important conclusion was made: intensive control of the level of glycemia and a decrease in the level of glycated hemoglobin by an average of 0.9% with a follow-up period of up to 10 years reduces risk of developing the complication of diabetes bv 12%, microangiopathies - by 25%, the risk of MI - by 16%. UKPDS shows that CVD is closely hyperglycemia associated with [United Kingdom Prospective Diabetes Study, 1998].

The definition, history of the scientific interpretation of the question of MS began, mainly from the 40s of the last century: the first idea of MS was formed by E.M. Tareev (1948) as follows: "The idea of hypertension is most often associated with obese hypersthenic, with possible protein metabolism with clogging of blood products of incomplete metamorphosis - cholesterol, uric acid ... "

• G. Reaven (1988) for the first time suggested that the development of all cascades of metabolic disorders is based on a single pathogenetic mechanism leading to a decrease in tissue sensitivity to insulin - insulin

resistance with developed compensatory hyperinsulinemia;

• G. Reaven described the symptom complex, including hyperinsulinemia, NTG, low cholesterol (HDL) cholesterol (HDL) levels and arterial hypertension, giving it the name "syndrome X"; for the first time L. Kaplan (1989) showed that abdominal obesity is an essential component of the "deadly quartet";

In 1990, M. Heneyeld, W. Leonhardt proposed the term "metabolic syndrome" and created a diagram of the components of MS risk [E.B. Grishchenko et al., 2009].

The prevalence levels and / or MS problems established in the works of the above-mentioned researchers are undoubtedly an information basis for planning large-scale preventive programs. However, of course, new information is required in the modern population, including in the regions of our large country and among residents - the elderly and senile population. Information about the epidemiology of MS by sex-age, ethnic, occupational groups, in particular among the population of the elderly, should be taken into account during clinical examination, as well as when planning regional programs for the prevention of CVD / CHF and their risk factors [Hyghes BB, Kuhn R, et al., 2011; Mamed M., Suslonova N., et al., 2007; O'brien S.C., Guilhot F., et al., 2008].

It is of direct scientific and practical interest to study both the prevalence of MS and its main components among the elderly and senile population of Uzbekistan, based on world trends in demographic development.

Demographic development in many countries is undergoing positive shifts: there is an increase in the birth rate, a decrease in overall mortality rates, an increase in life expectancy [Draffy comprehensive global monitoring from work and targets for the prevention and control of noncommunicable diseases, 2013].

The increasing average life expectancy and, at the same time, the registered increase in the number of cases of MS and its main components among elderly people mean that MS is becoming an increasingly significant burden on a national and national scale. Elderly

people are at high risk of getting sick with MS and its components as a result of physiological changes accompanying the onset and development of metabolic disorders, "end points" from them [Kobalava Zh.D., Kotovskaya Yu.V. et al., 2008; The first results of the Russian program "April"., 2005; Podzolkov V.I., 2014; Candari C., Cylus I, Nolte E., 2017].

Thus, at present, all over the world there is a tendency towards the enthusiasm of patients with MS. The widespread prevalence of MS, early disability and high mortality of patients from numerous severe complications gave WHO experts reason to determine the fight against MS as a priority for national health systems in almost all countries of the world [Ochanov R.G., Kalinina A.M., et al., 2003; Ochanov R.G., Kalinina A.M., et al., 2016; Hanefeld M., Pistrosh F., et al., 2014]. At the same time, insufficient preventive alertness of scientific communities and practitioners contributes to a low level of MS detection in the early stages. In our opinion, the intensification of screening for epidemiological support for early detection of the main components of MS will help to increase the effectiveness of measures for the prevention and treatment of MS, including medical examination of elderly and senile population groups.

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