



The Distribution of Smoking as a Risking Factor in the Development of Metabolic Syndrome in Overweight Patients

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ABSTRACT

Components of a metabolic syndrome meet much more often among smokers, than at non-smoking. Among the studied group smokers make 65,7% and all of them a male, among them men at the age of 51-60 years prevail. Among smokers the most widespread component of a metabolic syndrome is the arterial hypertonia (47,8%), the increased tolerance to carbohydrates (43,5%). Keywords: overweight, smoking, metabolic syndrome, arterial hypertonia

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In recent years, medical journals around the world have published numerous articles on terms such as metabolic syndrome, syndrome X, and the death quartet. This syndrome is causing serious controversy and debate among therapists, endocrinologists, cardiologists and neurologists. Metabolic syndrome (insulin-resistance syndrome) is a symptom complex that accompanies the development of a number of chain metabolic disorders in the body and leads to disruption of normal biochemical processes in all organs and tissues as a result of these polymetabolic disorders. According to the WHO, the problem of smoking has become a global problem, such as drug addiction and HIV / AIDS. According to statistics, the damage to human health due to smoking is much higher than the above problems. The fact that the WHO has set an international anti-smoking day shows how serious the problem is. It is especially sad that smoking is widespread among young people and women in European countries. Almost half of the world's population is a victim of trafficking. In our country, the first place among men aged 20-35 years is occupied by mining. The nicotine content of 1 smoker's mine

can be stored for up to 8 hours, which means that an average of 3 cigarettes contain nicotine in the mine during the day. Cardiovascular disease in smokers and their severe complications are 2.5 times more common than in non-smokers. Obstructive chronic diseases of the lungs are 3 times more common. In 1988, G.H. Reaven, summarizing the literature and the results of his own research, proved that the role of insulin resistance in the development of this syndrome and the pathogenesis of complications of the cardiovascular system is high, and introduced the term "metabolic syndrome" (MS) or "syndrome X". MS includes the following. Insulin resistance - (IR), Glucose intolerance disorder (GTB) - Hyperinsulinemia (GI), Low-density lipoproteins (ZPLP) and triglycerides - (G) Decreased levels of high-density lipoproteins - (LDL) Arterial hypertension. In 1989, N. Kaplan proposed a term such as "DEATH QUARTET", IR syndrome, and combined the following cases:

1. Abdominal obesity,
2. Impaired glucose tolerance,
3. Hyperinsulinemia,
4. Arterial hypertension.

In recent years, a group of researchers have studied hyperuricemia, left

ventricular hypertrophy, hyperfibrinogenemia, ovarian sclerocystosis. introduced new concepts. [P.Haffner ва бошк., 1992; M.Henefeld, W.Leonhardt, 1980]. Many researchers consider G. Reaven's definition of MS to be true. According to him, the main reason for the development of polymetabolic disorders, arterial hypertension and complications related to the cardiovascular system is insulin resistance. According to the WHO, about 30% of the world's population is overweight. 16.8% of them are women and 14.9% are men. The number of obese people is growing by 10% every 10 years. [W.Kannel, D.McGee, 1979]. The development of arterial hypertension in obese people is 50% more common than in people of normal body weight. [R. Stamler et al., 1998]. Studies have shown that an ammunition with a body weight of 4.5 kg has a systolic blood pressure of 4.2 mm Hg in women. ust. e, 4.4 mm wire in males. increases to ust. [M. Higgins et al., 1987]. High mortality among people with overweight is associated with cardiovascular disease. [M.Stern et al., 1995]. According to Framenheim's findings, with an increase in body mass, the incidence of cardiovascular disease increases in both sexes. This trend is also observed in the occurrence of coronary heart disease (CHD), myocardial infarction, stroke and stroke. Significant analyzes have been performed in a number of studies to assess whether obesity is an independent risk factor for cardiovascular disease. [H. Hubert et al., 1983].

Their data confirmed that obesity is indeed a sufficiently independent prognostic factor in the occurrence of cardiovascular disease in both women and men. The tests included vegetarian men who did not smoke or consume alcohol. With the increase in body mass index, the incidence of total mortality, UIC, oncological diseases and stroke increased. [K. Lindsted et al., 1991]. The increased risk of complications of cardiovascular disease begins with an increase in body mass from the upper limit of the norm, and increases with increasing body weight. Nurses Health Study studies have shown that women with an upper body mass index (TMI) above the norm have a higher risk of developing UIC than women with a TMI <21 kg / m² [W.

Willett et al., 1995]. The risk of UIC is 2 times higher in people with TMI 25 - 28.9 kg / m², and 3 times higher in people with TMI > 29 kg / m². Framingham studies have shown that the incidence of cardiovascular complications increases proportionally with the increase in body weight after the age of 25 years. Decreased body mass index reduces this risk. In other studies, observations were made in 1396 people over a period of 15 years to study the effect of body mass on cardiovascular complications - [G. Borkan et al., 1986]. When analyzing the age, smoking status, and body weight of the subjects, ammunition remains the leading prognostic factor in the occurrence of all risk factors (increased blood pressure, total cholesterol, triglycerides, increased glucose in the diet and 2 hours after a meal). Arterial hypertension is common among people who smoke ruju. There is a direct correlation between cardiovascular disease and, in particular, arterial hypertension and ischemic heart disease with constant smoking. When nicotine is injected, it activates N-cholinergic receptors in the peripheral nervous system. Activation of N-cholinergic receptors has a pressor effect on blood vessels. An increase in the constant tone in the intema layer of the vessels leads to dysfunction of the endothelium, i.e. it affects the production of NO. This effect is in favor of substances that have vasopressor activity, and the vessels begin to constrict further. Under the influence of constant nicotine, inflammatory processes take place in the vascular endothelium. In inflamed endothelium, lipid deposition and the development of atherosclerosis are accelerated. This, in turn, leads to the development of coronary heart disease. In those who quit smoking, the average mining pressure is 5-10 mm. sim. decreases to ust. [Ya.M.Kabak, G.Goze, 1962]. Objective To study the prevalence of smoking among the population of Bukhara city polyclinic No. 4 and its connection with the components of metabolic syndrome. - To study the prevalence of smoking among the population -Determine the relationship of smoking to the components of metabolic syndrome.

Materials and methods. The research was conducted on the territory of the Bukhara city polyclinic No. 4. In the course of the work, we randomly selected 106 people from the population of the polyclinic aged 20-70 years. The age and sex composition of the population, randomly selected, were almost identical. We conducted a full clinical, laboratory (biochemical) and instrumental examination of the selected population in a prospective way. In our study:

- Arterial blood pressure and pulse
- Body weight, sitting and standing buoys
- Kettle index $KI = \text{body weight} / (\text{buoy})$ was determined by formula 2
- Chest, waist and hip circumference
- ECG at 12 connections at rest
- mining and General analysis of urine
- The amount of sugar in the urine was determined three times - first in the stomach, then 1 mg / kg of glucose was given, and then 1 and 2 hours later.
- The lipid fraction in the deposit (total cholesterol, triglycerides and - lipoproteins) was determined. Chest pain (Rose's questionnaire), back pain, bad habits, genetic predisposition and psychological conditions were also studied in a special survey. The survey focused on specific smoking-related questions, such as what type of cigarette to smoke (filtered or unfiltered), how much to smoke per day, and for how many years. We used the following materials during the audit:
- Rostomer, medical scales, centimeter tape
- Tonometer, phonendoscope
- ECG (Altonic) device
- Glucometer (accu-check), scarifier, express strips
- Glucose powder
- Syringes, test tubes, tripod, centrifuge and offer (Hospitex)
- Special surov the results were analyzed statistically and analytically and conclusions were drawn.

Results and Analysis. In our study, 103 people were randomly selected. Their age, gender, occupation, and lifestyle varied, and they were selected from an unorganized population. Gender analysis of the participants Female Male Abs Number of% Abs% 35 34 68 66 According to the results of the analysis of the age of the subjects, the proportion of able-bodied adults was somewhat deficient. In order to study the prevalence of smoking among the population, a special questionnaire consisting of several questions was asked of the respondents and

completed by the medical staff. The questionnaire consisted of questions to determine whether smoking as a risk factor leads to cardiovascular disease, and its role in the development of metabolic syndrome. Analyzing the results of the survey, it was found that no one smokes among women, regardless of the type of smoking. Of the men, 23 (65.7%) smoked. 5 (21.7%) smokers smoke nasvai, 15 (65.2%) smoke cigarettes, and the remaining 3 (13%) smoke both. Characteristics of smokers by age groups 65.2 21.7 13 65.7 cigarette nos 21-30 31-40 41-50 51-60 61-70 3 4 5 6 5 13 14.4 21.8 26 21.8 abs% . According to the analysis of smokers by age groups, the majority of male smokers are 41-50 and 51-60 (21.8% and 26%), respectively. Smoking is much lower among 21-30 year olds than in other age groups. The negative effects of smoking on one of the harmful habits largely depend on the duration of smoking. Responses to the questions asked indicated that the majority of smokers (34.87%) reported that they had not smoked for 2 years. It has also been 5-10 years since 30% of smokers responded. 21.8% have been smoking for more than 10 years. Instead of studying the characteristics of people who are addicted to smoking, we tried to study how MS components are distributed among smokers and non-smokers. The results are shown in the next diagram.

2 years	2-5 years	5-10 years	more than 10 years
8	3	7	5
34.8	13	30	21.8

abs%. Distribution of MS components among smokers, in contrast, ammunition body weight and lipid metabolism disorders were found to be less common than others. For comparison, we present the following diagram. Comparative characteristics of the distribution of MS components ab s% 9 39.1 11 47.8 8 34.8 10 43.5 NTG hyperlipidemia arterial hypertension in the population 47.5 39.1 33 47.8 42.8 34.8 37.9 43.5 ortik cha weight AG Hyper liped emiya NTG. The results showed that arterial hypertension accounted for 33% of the population and 47.8% of smokers. Impairment of carbohydrate tolerance increased from 37.9% to 43.5% among smokers.

Conclusion

1. Smokers make up 65.7% of men and the majority of them (65.2%) smoke. Smoking was not found at all among women.
2. Among smokers, 51-60 year olds predominate (26%), 34.8% of smokers smoke for up to 2 years, and 30% smoke for 5-10 years.
3. Among smokers, the most common component of MS is AG (47.8%), the increase in tolerance to carbohydrates is 43.5%.
4. Smoking plays an important role in the emergence and complication of MS components. MS components are more common among smokers than others.

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