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Resume,

The article presents the results of the study of the prevalence of some components of metabolic syndrome among the unorganized population. With age then is an increase in the incidence of abdominal obesity, overweight and obesity. In health facilities to identify the state of abdominal obesity, overweight and obesity is insufficient.

Keys words: metabolic syndrome, abdominal obesity, overweight, obesity.

Relevance

Currently, obesity has become one of the most important medical and social problems in the world due to its high prevalence and significant costs to overcome its consequences. The prevalence of overweight and obesity in the Russian Federation is 59.2% and 24.1%, respectively [7]. According to UN report, in 2013, the Russian Federation ranked 19th among all countries in the world in the prevalence of obesity, 8% behind the top countries in Mexico and the United States. According to a multicenter (11 regions of the Russian Federation) observational study of ECVD-RF (Epidemiology of cardiovascular diseases and their risk factors in the regions of the Russian Federation) with the participation of 25,224 people aged 25–64 years, the prevalence of obesity in the population was 29.7% [1]. Over the past three decades, the prevalence of overweight and obesity in the world has grown by almost 30–50% among adults and children, respectively.

Today, obesity is considered not only as the most important risk factor for cardiovascular diseases and type 2 diabetes (according to the World Health Organization (WHO), overweight and obesity determine the development of up to 44–57% of all cases of type 2 diabetes, 17– 23% of cases of coronary heart disease, 17% - arterial hypertension, 30% - gallstone disease, 14% - osteoarthritis, 11% - malignant neoplasms [2,8], but also impaired reproductive function and an increased risk of cancer [5,6]. In general, obesity according to expert estimates leads to an increase in the risk of cardiovascular mortality by 4 times and mortality due to cancer by 2 times [3,4].

Objective:

To study the prevalence and detectability of abdominal obesity among an unorganized population in primary health care settings.

Materials and methods

The surveyed population is represented by a representative sample of the unorganized female and male population of the city of Bukhara. For the initial screening of voter lists according to a random principle, a 10% representative sample of women and men 15-69 years old was made up of 797 people.

The metabolic syndrome was diagnosed in the presence of abdominal obesity (waist circumference> 94 cm for men and> 80 cm for women) if the body mass index exceeds 30 kg / m2.

Overweight, according to the recommendations of the International Group on Obesity (1997), is fixed at the Ketle index calculated by the formula: weight (kg) / height (m) ^{2}, $\geq$ 25, and IR levels $\geq$30 are taken for obesity. However, in population studies for BMI it is recommended to take the values of IR> 29 (Rose G.A., Blackburn H., 1968). Therefore, in this work, the criteria for BMI were taken as IC $\geq$ 30, since this level of IC differs little from the criteria for BMI recommended for population studies and, at the same time, meets the criteria for obesity recommended by the International Obesity Group.

Results and discussions

Currently, in assessing obesity, great importance is attached to abdominal obesity (AO). This is due to the fact that many studies have shown that abdominal obesity is a more

important risk factor for the development of insulin resistance and cardiovascular disease.

According to the data obtained, the prevalence of AO among the population was quite high (tab. 1.). The overall prevalence of abdominal obesity among women was 42.57%, and among men 24.9% (the revealed differences were statistically significant, P <0.01).

Table №1

The prevalence of abdominal obesity in the population (%)

Age category	Women n=555		Men (n=242)	
	Have AO 235	No AO	Have AO 60	No AO
20-29	17,74	82,26	14,45,	85,55
30-39	46,49	53,51	35,54,	64,46
40-49	46,55	53,45	29,31,	70,69
50-59	62,50	37,5	54,65,	45,35
60-69	78,13	21,87	48,64	51,36
Total	42,57	57,43	24,9	75,1

Note: the table shows the significance of differences relative to the previous age group.

It is worrying that 17.74% of young women have AO. It should be noted that in the fourth decade there is a large increase in the frequency of AO. At the age of 30-39 years, the frequency of AO (46.49% is 2.62 times higher than at the age of 20-29 years (17.74%). The revealed differences were highly significant (p <0.01). Then, up to 50 years, the frequency of AO practically does not change, but in the age groups of 50-59 years and 60-69 years, the frequency of AO again increases significantly (62.5% and 78.13%, respectivelySuch a high percentage of AO indicates that the female population has formed an unfavorable epidemiological situation regarding AO. Given that AO is one of the triggers of MS, it should be recognized that in the female population there is a very high risk of CVD formation and related mortality.

Among men, abdominal obesity occurs - 14.45%, 35.54%, 29.31%, 54.65% and 48.64%, respectively. The frequency of AO in men aged 30-39 years compared with 20-29 years old is 2.46 times, and the age of 50-59 years old than at the age of 40-49 years old increased by 1.86 times.

Given the high importance of abdominal obesity in the development of cardiovascular and other diseases, the issue of detectability of abdominal obesity among the surveyed population was of some interest (Table 2).

As it turned out, 86.67% of men who had abdominal obesity during a screening examination did not diagnose this pathology with the doctors of the health care facility. However, among women, the percentage of undetected cases of abdominal obesity was slightly lower - 76.7%. The following fact should be noted - patients with a normal waist circumference were informed that they had obesity (1.89% in women and 2.21% in men).

The data presented allow us to conclude that among the unorganized population of Bukhara the state of diagnosis of abdominal obesity is unsatisfactory.

According to the recommendations of the International Group on Obesity (1997), BMI and obesity are detected based on the assessment of the Ketle index, which reflects growth-weight indicators. The data obtained (Table 3) indicate a fairly high prevalence of BMI and obesity, both among women (20.65% and 18.48%) and among men (37.34% and 12.03%, respectively). It should be noted that BMI was significantly more frequent (p <0.01) among men, and obesity was significantly more common (p <0.05) among women.

Next, an analysis of the detection of BMI and obesity was performed (Table 3).

Table №2.

Detection of abdominal obesity by doctors health care facilities (HCF)

Sex	The presence of abdominal obesity	Have abdominal obesity		No abdominal obesity	
		n	%	n	%
Men	Identified in health care facilities	8	13,33	4	2,21
	Not detected in health facilities	52	86,67	177	97,79
Total among men		60	100,0	181	100,0
Women	Identified in health care facilities	55	23,4	6	1,89
	Not detected in health facilities	180	76,6	311	98,11
Total among women		235	100,0	317	100,0

Note: The table shows the significance of differences between the indicators of men and women.

Tableb№3.

BMI detection and obesity status in health facilities

Sex	Availability of BMI and Obesity	BMI		Obesity	
		n	%	n	%
Men	Identified in health care facilities	10	11,11	18	62,07
	Not detected in health facilities	80	88,89	11	37,93
Total among men		90	100,0	29	100,0
Women	Identified in health care facilities	36	31,58 *	62	60,78
	Not detected in health facilities	78	68,42 *	40	39,22
Total among women		114	100,0	102	100,0

Note: The table shows the significance of differences between the indicators of men and women.

Analysis of the state of detection of BMI and obesity showed that in medical institutions BMI is detected only in 31.58% of women and 11.11% of men, these differences were statistically significant (p <0.05). The situation with the detection of obesity in health facilities is somewhat better. In healthcare facilities, obesity was detected in 60.78% of women and 62.07% of men. It requires special attention that 62.42% of cases of obesity in women and 88.89% of obesity in men were not diagnosed in health facilities.

Conclusion

1. Abdominal obesity as the main criterion for MS after 30 years is found in almost half of the population of Bukhara.

2. Abdominal obesity among women than in men 1.17 times more common.

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