



PECULIARITIES OF MANAGEMENT OF PATIENTS WITH CHD IN MENOPAUSAL WOMEN

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Abstract. In recent years, there have been ongoing scientific works in our country devoted to the structure of coronary heart disease and arterial hypertension in menopausal women. The significance of climacteric period severity as an important risk factor in the development of endothelial disorders in heart and vessels that are closely associated with endocrine homeostasis disorder and cardiovascular disease development has been revealed in menopausal CHD patients based on the complex immune and hormonal studies. The incidence of polymorbidity with manifestation of elevated cholesterol, TG, LDL levels and decreased levels of estradiol, estriol and progesterone increases in patients with IHD during the menopausal period.

Keywords. CHD, menopause, estradiol, estriol, progesterone, estrone, Cimicifuga

Relevance. Cardiovascular diseases (CVD) are the main cause of morbidity and mortality worldwide. The most significant share in the structure of cardiovascular diseases is coronary heart disease (CHD), which occupies one of the leading places among the causes of mortality in the adult population. According to the estimates of the World Health Organization (WHO), more than 17 million people die annually in the world from CVD, including more than 7 million from CHD. CHD is the leading cause of death worldwide for both men and women. According to the American Heart Association, more than 15 million people have some form of the disease. CHD refers to the buildup of atherosclerotic plaque in the blood vessels that supply oxygen and nutrients to the heart.

Menopause, defined as the completion of 12 months after the last menstruation or at the time of bilateral ovariectomy, is a consequence of follicle depletion resulting in estrogen deficiency. Epidemiologic data have shown that the menopausal transition is associated with a higher prevalence of CVD risk factors such as central obesity, atherogenic dyslipidemia, glucose intolerance, arterial hypertension (AH), and nonalcoholic fatty liver disease (ANFLD) compared with premenopausal status.

In particular, the transition to menopause leads to a redistribution of body fat toward male visceral obesity. Indeed, the onset of menopause is followed by a decrease in fat oxidation and energy expenditure without changes in energy intake. In studies using dual-

energy X-ray absorptiometry, CT or MRI, postmenopausal women had 36% more breast fat and 49% more intra-abdominal fat area compared to premenopausal women . These differences were independent of age and total fat mass . Moreover, biopsy studies in postmenopausal women showed hypertrophy of adipocyte cells in both subcutaneous and visceral adipose tissue, as well as increased inflammation and fibrosis compared to premenopausal women . One of the mechanisms of body fat redistribution in postmenopause may be an increase in adipose tissue lipoprotein lipase activity and a lower degree of lipolysis due to decreased estrogen concentration .

With respect to menopause-related cardiovascular risk, changes in lipid profile during the transition to menopause are important. Briefly, these include increases in total cholesterol (TC), low-density lipoprotein cholesterol (LDL-C), triglycerides (TG), and decreases in high-density lipoprotein cholesterol (HDL-C). The latter mainly refers to the HDL 2 -C subfraction . Notably, in addition to these changes in lipid profile after the onset of menopause, atherogenic changes in apolipoprotein concentrations and their ratios have also been reported. These include increases in apolipoprotein B (apoB) concentrations and in the chc-LDL/LDL/apoB ratio in postmenopausal women, which are evident at ages 50-55 years, approaching and exceeding the corresponding values in men. Moreover, despite the increased concentrations of apolipoprotein AI (apoA-I) and apolipoprotein A-II (apoA-II) in postmenopausal women compared with premenopausal women, the ratios of HDL-CLDL/apoA-I and HDL-CLDL/apoA-II decrease to the lowest degree observed in men, indicating a lower cholesterol content in HDL particles. Regarding lipoprotein (a) (Lp(a)), an independent risk factor for atherosclerotic cardiovascular disease, there are inconclusive data regarding whether it increases after menopause .

Materials and Methods of the Study. The paper analyzed 184 women aged 40 to 60 years (mean age 46.8 ± 3.6 years) who underwent examination and treatment in Urgench branch of the Republican Specialized Scientific and Practical Center of Cardiology for the period 2018-2021.

General clinical examinations were conducted: Anamnesis, complaints, general examination, blood pressure, gynecological examination, general blood analysis, general urine analysis, electrocardiography (ECG).

During the study, all the symptoms that occurred in women of each group were studied. It was found out to which group of disorders these or other manifestations of the syndrome belonged. Group I included neurovegetative disorders: high BP, headache, palpitations, chills, dry skin, fever, sleep disorders, sympathoadrenal crisis. Group II - metabolic and endocrinologic disorders: obesity, hypotrophy of the genitals, thyroid disorders, adrenal glands, pain in the joints, muscles. Group III - psychoemotional disorders: memory impairment, reduced ability to work, irritability, tearfulness, mood deterioration.

Results of the study. In the studied groups, pain in the heart area had angina pectoris character and was confirmed by instrumental methods. The diagnosis of CHD was established according to generally accepted criteria on the basis of anamnesis, climacteric card and results of additional studies (ECG, exercise tolerance, heart rate variability, lipidogram). The patients of the main group had such manifestations of CHD as angina pectoris I-III FC, postinfarction cardiosclerosis. Patients with acute coronary syndrome and severe heart failure, heart rhythm disturbance were not included in the study. The severity of chronic heart failure was determined according to the classification of N.D. Strajesko and V.H.

Vasilenko (1935) and according to the classification of the New York Heart Association with the determination of four functional classes (FC), using a 6-minute walk.

1. Two groups of 164 patients with moderate and severe degree of menopausal syndrome, depending on the presence of IHD, were formed for further comparative analysis. The main group included 86 (52%) patients with IHD. All patients had absence of menstruation for more than 1 year. In 73 (85%) patients of this group menopause was physiologic, in the remaining 13 (15%) - surgical.

2. The comparison group included 78 (48%) patients without IHD who had regular or irregular menstrual cycles or with absence of menstruation for less than 1 year.

In 29 patients, the cathamnesis of the disease was followed for 3 years after inclusion in the study, depending on the nature of the therapy used. At discharge from the hospital all patients were prescribed therapy including cimicifuga. The patients kept a special diary reflecting changes in their well-being, the number of visits to the doctor, hospitalizations, and the results of laboratory and instrumental examination.

1. During two years after discharge from the hospital, 9 (31%) women continued to take cimicifuga, the rest stopped taking cimicifuga for various reasons and at various times. Two groups were formed for comparative analysis: Patients who received cimicifuga throughout the follow-up period (Group 1, n=9);

2. Patients who discontinued cimicifuga at any stage of follow-up (group 2, n=20).

3. The spectrum of estrodiol, estriol, estrone and progesterone hormones was studied in the observation groups to assess their diagnostic significance in predicting the risk of IHD destabilization in menopausal women under conventional treatment (Table 3.3) and conventional pharmacotherapy in combination with Cimicifuga (Table 3.4).

Table 3.4

Concentrations of hormones estrodiol, estriol, estrone and progesterone in postmenopausal patients without and with proven CHD on the background of traditional treatment

Groups	Estrodiol, pg/mL	Estriol, ng/mL	Estrone, pg/mL	Progesterone, nmol/L
Control (n=52)	123,3±9,99	47,4±2,76	78,5±3,25	2,1±0,08
Group 1 (n=78) Postmenopause without CHD	43,8±1,36	18,6±0,79	49,4±1,35	0,7±0,03
Group 2 (n=86) Postmenopause with CHD	35,9±1,23	7,9±0,40	26,9±0,93	0,4±0,02

Table 3.24

Concentrations of hormones estrodiol, estriol, estrone and progesterone in postmenopausal patients without and with proven CHD on the background of traditional pharmacotherapy in combination with "Cimicifuga"

Groups	Estrodiol, pg/mL	Estriol, ng/mL	Estrone, pg/mL	Progesterone, nmol/L
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Postmenopause without CHD, traditional treatment n=38	59,3±2,08	24,61,28±	52,5±2,05	0,9±0,04
Postmenopause without CHD, trad. Treatment +C n=40	78,9±2,32	29,8±1,17	56,8±2,09	1,3±0,05
Postmenopausal women with CHD, trad. Treatment n=42	40,5±1,81	11,6±0,58	31,3±1,36	0,6±0,04
Postmenopausal women with CHD, trad. Treatment +C n=44	56,2±1,69	21,3±0,56	42,5±1,41	1,1±0,04

The data shown in Table 3.24 indicate that the spectrum of the studied hormones after complex traditional treatment with the addition of the drug "Cimicifuga" significantly increases the concentration of estrodiol, estriol, estrone and progesterone (p<0.05). The results of the study confirm the effectiveness of timely hormone replacement therapy (HRT) in combination with the administration of "Cimicifuga". In our case, the "benefit-risk" ratio in patients taking "Cimicifuga" benefit exceeds the risk and HRT is the gold standard for treatment of women in PMP with CHD and improves the quality of life of this contingent of women. Middle-aged women with menopausal symptoms show unfavorable changes in CVD risk factors and, as a consequence, an increased risk of CVD. Our study revealed that 81 women (49.4%) had manifestations of menopausal syndrome of moderate severity (pathologic menopause) and 83 women (50.6%) had severe menopausal syndrome. All the symptoms of CW were combined in various combinations, determining the clinical picture and varied severity of the disease.

Since the factors that can be influenced are of crucial importance for the development of specific preventive measures, the factors of greatest interest are AH, lipid metabolism disorders, smoking, excessive body weight, etc.

Conclusions. In patients with a severe degree of menopausal syndrome symptoms were determined in various combinations, where symptoms of pronounced hot flashes, increased blood pressure, palpitations and pain in the heart area prevailed. At the same time, in patients with a medium degree of severity, the symptoms of menopausal syndrome were expressed in signs of depression, increased weepiness, and memory decline. It should be noted that coronary heart disease in patients with severe menopausal syndrome was 69% higher compared to patients of women with average severity. Thus, the results of these studies allowed to personalize menopausal hormonal therapy taking into account risk factors for the development of severe CHD.



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