Reproductive Health of Premenopausal Age Women

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ABSTRACT

Fast growth of disease rate among women of age in phase with menopause age is a compelling argument for menopause consideration as one of the main factors affecting quality of lifetime. High rate and seriousness of premenopausal complications impel native and foreign scientists to study this issue, against absence of clear views on development scheme and methods of its prevention and treatment. One of the main tasks, facing society, is perseverance of elderly people's possibility for quality life that is only possible under conditions of mental health, self-maintenance capacity and sufficient physical activity. The term 'menopause', according to a range of authors, defines as permanent menstruation absence associated with ovarian dysfunction. Clinically, menopause is detected in retrospect, if menostasia period reaches 12 months after last menstruation. Term 'surgical menopause' is used towards women, whose menstruation function was artificially stopped because of ovariohysterectomy or hysterectomy. If two types of surgical menopause can be related to estrogenic critical types, than surgical menopause with one or two ovaries perseverance doesn't have such clarity. References about ovarian function after hysterectomy are highly controversial, what complicates surgical interference extent choice and menopausal disturbances prevention methods. Ovarian parenchyma involution takes place at the after hysterectomy period, that leads to reproductive hormones (estrogen, progesterone, testosterone) output decreasing and pituitary gland gonadotropic hormone output increasing. That is why we use hormonal replacement therapy (HRT) for treatment under ovarian functional activity decreasing. HRT use remarkably reduces vasculomotor symptoms and disorders frequency and course, improves carbohydrate and lipid metabolism, prevents reducing of bone mass mineral density and improves woman's life.

Introduction

At premenopause in front of all organism's organs and systems aging changes, involution processes prevail in reproductive system of all others. Rapid decreasing of ovarian hormonal activity that results in hormonal imbalance, and mainly in estrogenic deficiency lies in basis of this.

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Decreasing of follicles and follicle-stimulating hormone (FSH) sensibility, fall of progesterone release and slow reducing of total estrogen release stimulates gonadotropic hormone B synthesis. Most authors accept idea that the hormonal status, in particular fast reproductive hormones level fall, defines premenopausal flow, occurrence risk and complications character.

Sex steroids affect different organs and tissues through direct interaction with specific receptors locating in different organs and tissues as well as in the result of endocrine exchange processes assistance.

Disorders that complicate premenopausal period flow divides on three groups (Gosiengfiao & Woodruff, 2017). First group consists of early symptoms: neurovisceral and phycoemotional, defining symptom complex of climacteric syndrome (CS); second group includes later symptoms from GUT side and skin; third group combines late metabolism disorders – bone loss and cardiovascular disease. Reasons of the disorders development, hormonal changes role under their development and flow are still being an object for discussions.

Symptom complex CS, frequency of which, according to some authors, ranges from 25% to 90%, is of great interest. Almost half of women with CS have difficult disease flow; every third woman has a moderate character of the disease. Only 18% of patients' acute manifestations of CS disappear during first year since their development, in 56% cases they protract for 1-5 years, and in every forth woman (26%) disease has even longer duration (Farage et al., 2017a; Darlenski, Berardesca & Fluhr, 2017).

Reasons of CS development have not been sufficiently studied till present times. In modern conditions, this syndrome is viewed as multiple pathological state, in development of which constitutional and genetic factors, physical state of woman before menopause, ecological living conditions and ethnical factors play a great role.

The most widespread among premenopausal complications is vegetovascular dysfunction, especially hot flashes, though there is no consensus towards its pathogenesis. Great role in CS pathogenesis resides on functional changes of hypothalamus structures and vegetal balance disruption, which take place in heat regulation process (Psaros et al., 2017).

There is also an opinion (Psaros et al., 2017) that reasons for hot flashes can be interferences of hormonal, metabolic and psychogenic factors. But main factor in hot flashes development is definitely estrogenic deficiency.

KS psycho-emotional disorders, according to most authors, are determined by the dysfunction on hypothalamus cores and limbic system level because catechol amines and serotonin is the key neurotransmitters in behavior and mood control.

On the modern stage, there are three ways of estrogenic affect on the psycho-emotional state: estrogen increases degradation stage of monoaminooxidase (MAO) what leads to serotonin increasing in the brains; helps tryptophan (serotonin predecessor) to change from bound state into plasmatic albumin, that supports its metabolisation into serotonin. Estrogens also positively affect acetylcholine energetic system (Gosiengfiao & Woodruff, 2017).

It was proved that hormonal replacement therapy (HRT) helps to regenerate acetyl cholinesterase in blood plasma. Clinically, it occurs in short-term memory improvement and cognitive function.

Besides, estrogens directly improve cerebral blood flow and indirectly stimulate growth factors, and have modulating effect on synthesis, emanation and metabolism of neuropeptides, neurotransmitters and its receptors.

Women problems of metabolism disorders at menopause, displaying real threat for every woman at this age and negatively affecting demographic rate, are widely discussed on the pages of scientific publications. One of the main places among disease and death reasons in women of premenopausal age takes cardiovascular disorders, being a reason of death in 5-6 times more often than at threat of breast cancer or endometrial process.

It is hard to separate aging and menopausal changes influence on cardiovascular system. Though, rage of epidemiological surveys showed that menopause causes higher risk of cardiovascular diseases development. Women after menopause have high arterial pressure (AP) more often than men at the same age, and half of all patients with arterial hypertonia (AH) form women of menopausal age. WHO experts consider menopause as a high risk factor for cardiovascular pathology among women (Isacco & Boisseau, 2017).

Most scientists support the idea that among changes defining cardiovascular system state at menopause, the leading role belongs to increase of AP, vessel responsiveness changes due to dominance of vasoconstriction over vasodilatation, blood lipids changes, fibrinogen content rise, blood viscosity and thrombocyte adhesion properties increasing that conduct hypercoagulability, and insulin resistance increasing. Besides, SNC neurotransmitter systems disorders, occurring at menopause, also could be a basis for cardio and neuro pathologies.

It is also known that development risk of premenopausal metabolism disorders depends on total amount of other factors, such as woman's health at reproductive age, ecological environment state, professional factors and physical activity and others.

Pathogenic mechanism of metabolism premenopausal disorders is still not studied enough at preset, especially in changes of blood coagulation and lipids exchange processes. These issues are always being an object for discussions on many publications. According to modern data, the critical role in these disorders pathogenic mechanism lies on estrogen function lapse. Some scientists tie cardiovascular system changes in women of premenopausal age with decrease of estrogen direct interference with specific receptors on vascular walls and endothelial tissue, others – with decrease of their blocking action on cells calcium channels of arterial smooth muscles and estrogen fibrinolytic influence decrease. There is also data about sodium redistribution in women's organism at menopause that accompanied by increasing of blood pigment level, electrolyte content, blood viscosity and AP (Phuong & Maibach, 2017).

According to literature data, lipids exchange defines cardiovascular system state due to high-density lipoprotein (HDL) level decrease and low-density lipoprotein (LDL) level increase. Triglycerides role in cardiovascular disorder development is not completely certain (Phuong & Maibach, 2017).

Some authors connect HDL concentration decrease in women at menopause with hypoestrogenesis. According to them, the estrogen concentration level decrease in blood serum leads to lipoprotein lipase activity increase, which in its turn stipulates LDL concentration increase.

As a result of experiments it was proved that estrogens increase LDL receptors amount. This examination resulted in theory that woman's LDL concentration aging changes are modulated by estrogens presence and their content's growth in increase of women premenopausal duration happens because of LDL receptors reduction in result of estrogens level decrease.

It is proved that HRT has a positive effect on cardiovascular system sate due to ZAP level, total amount of LDL decrease, and HDL level increase. At the modern stage,

there is an idea of necessity to study deeply lipids exchange in women of premenopausal age to determine time, duration and complications level of changes in women of premenopausal age and interrelation of ovarian hormones level.

Fibrinogen concentration and V factor growth in blood serum at menopause appears also to be risk factor of cardiovascular disorder. And, though, overwhelming majority of scientists express theory about correlation between estrogens level and blood coagulation capacity at premenopausal period, this issue remains not highlighted enough (Skelton, 2017).

It is proved that HRT has a positive effect on cardiovascular system sate due to ZAP level, total amount of LDL decrease, and HDL level increase. At the modern stage, there is an idea of necessity to study deeply lipids exchange in women of premenopausal age to determine time, duration and complications level of changes in women of premenopausal age and interrelation of ovarian hormones level.

Data over the interrelation of AP level and menopause are scares in amount and have only supposition character. A range of researches have contradictory character: absence of any difference between average pressure indexes in women of pre- and after menopausal age, systolic pressure rise, and diastolic pressure fall in women at menopause. Along with that, it was found that AP rise is a result of aging and not hormonal status changes (Manassiev, 1996; Muzii et al., 1996). Though, it is possible that menopause itself, without disorder's factors, could not be the reason of AP rise, although ovarian function reversal can be a starting mechanism that give rise to AH. In any case, it is proved that menopause worsen the existing AH flow.

Along with that it was proved that pressure rise connected with calcium metabolism disorder, which occurs in calcium level fall in blood serum. This leads to secondary parathyroid gland activation and, as a result, intense calcium removal from the bones. Sustained disturbance of calcium exchange in people with hypertonic disorder has a risk of bone loss development. According to M.S. Saviano (1996) systolic blood pressure is a substantial predictor of hip high demineralization.

Premenopausal bone loss is a late exchange endocrine disorder of life turn that is characterized by bone mass loose and bone tissue microstructure disruption that lead to bones brittleness increase and in future fractures (Maier, 2017). Regardless bone loss dissemination, prevention strategy development of this disorder became one of the priority directions in public health care.

According to WHO experts, among women's diseases bone loss stands at the forth place after cardiovascular, oncological diseases and diabetes. In developed countries, women of premenopausal period have bone loss in 25-40% of cases and among patients with bone loss women make 80% (Phuong & Maibach, 2017).

Vertebral fractures causing postural disorder, growth decrease, work decrement, are accompanied by pain syndrome and worsen life quality in great amount, although, death rate caused by them nears to 4% (Psaros et al., 2017). Almost 20% of patients with the hip fractures die during the first year of its development and more that 50% of survived patients remain handicapped and require constant care.

Thus, high rate of premenopausal complications, absence of single view of its development reasons and mechanisms testifies the topmost importance of further researches of after menopausal disorders risk factors and pathogenesis in order to develop pathogenically sustained differentiated cure and prevention complexes. Decrease of the complications amount and their easy flow due to early diagnosis and timely correction, in its turn, can help to improve quality women's life at premenopausal period.

Preventative measures

Prevention and treatment of climacteric women disorders attracts even more scientists' attention as to drug-free as well as to medicament hormonal and non-hormonal therapy.

Accurate calcium use, moderate physical activities, balanced diet, normal body weight sustention are important elements of medicament treatment and prevention measures.

To lower osteoporosis fractures the most effective solution is high level of bone mass, formed during organism development (Tiidus, 2017).

In CS treatment it is reasonable to use physiotherapeutic methods: brain and neck DC stimulation, Novocain electrophoresis of superior cervical ganglion anatomical projections, crio-encephalitic hypothermia and classical hand massage of collar area, and also acupuncture as an independent therapeutic method and in combination with other treatment methods.

There are data in literature about using non-hormonal medicament remedies with melatonin use for climacteric complications treatment, successful usage of methyldopa and clonidine. A range of authors state reasonable use of vitamin therapy in complex with minerals (especially calcium, magnesium, zinc, barium and phosphorus) as geroprotectors, antioxidants and immunomodulators in order to cure climacteric changes.

Use of flavonoids, which along with immunomodulating and antioxidantive effects play a great role in trans membrane exchange showing antiatherogenic and hypo limit properties, are considered to be promising (Summers, 2017). Acting as phytoestrogen, flavonoids have a moderate anabolic effect on bone system, muscles and brain, and not causing negative hyper proliferation influence on endometrium and mammary gland tissues, selectively functioning as estrogen antagonism and agonist at the same time.

Though, stable therapeutic effect can be reached only while using HRT medications. Usually HRT is used for both treatment of early premenopausal complications and long-lasting precaution measures of cardiovascular disease, bone loss, Alzheimer's disease and other disorders that come with woman's organism aging. During last years, according to scientific publications, there was a big amount of researches of HRT influence on metabolic processes. Estrogens show biological properties explaining their cardio protective effect (Hachul, Bezerra & Andersen, 2017). Exogenic estrogen help to increase HDL content, decrease LDL and fibrinogen concentration. There were established estrogens antioxidants properties and their ability to lower homocysteine concentration. Estrogens also block calcium channels, change vessels reactivity, increase glucose tolerance. Some authors indicate direct effect of the estrogens on endothelium coronary artery, causing by this vasodilatation.

At HRT during premenopausal period, death rate from cardiovascular disorder falls on 25-50%, thus, a lot of authors tend to believe that the effect connects to its influence on lipids profile (Prakash et al., 2017). Lipids exchange changes determine only 25-30% of estrogens positive influence on neuro- and cardiovascular disorders and the rest 70% is a result of hemostasis system changes.

Estrogens affect hemostasis, increasing blood fibrinolytic and endothelial cell membrane potential, and decreasing blood elements capacity to adhesion. It is proved that estrogens use leads to fibrogen concentration decrease (Farage et al., 2017b).

Estrogens positive effect on AP occurs due to endothelial cells discharge of prostacyclin. Transdermic estradiol intake results in blood disk thromboxane discharge

decrease and intensifying of serotonin-, relaxin- mediated vasodilatation (Tamimi, 2017).

Estradiol up regulates oxidize synthetize eduction, intensifies acetylcholine to reduce oxidize synthetize, thus, increasing endothelial cells output of nitrogen oxide (N0), which considers to be one of the strongest endogenic vasodilators.

HRT takes the main place in prevention and treatment of premenopausal osteoporosis. The duration of HRT prescription remains an issue of discussions till modern days. Average HRT duration to prevent osteoporosis fractions and improve bone system state in average takes from 5 to 10 years (Anders et al., 2017).

There is no data about correction and prevention possibilities of premenopausal disorders for women with clinical menopause using hormonal replacing therapy and complex phytotherapy, what led to these studies.

Materials and methods

It is leaded analyze of 90 outpatient cards of women with menopausal problems, which were divided on following groups:

— a basic group – 60 women with neoplasms benign, unspecified tumors of uterus and oothecomas

— a subgroup – 30 women (a basic group), which were got operated in volume

— of oothecohysterectomy, and got traditional preventive and curative interventions;

— a group – 30 women (a group of interest), which were got operated in

— volume of oothecohysterectomy, and got our proposed methodology of preventive measures of menopausal abnormalities;

— a group – 30 women (a control group) with a physiologic progression of a natural menopause.

Clinical features evaluation of climacteric syndrome (CS) progression of examined women was leaded with calculation of Kupperman Index (KI) and a menopausal index (MPI) in a modification of K.L. Campbell (2017) after computer processing of data, which was received during of completing of a specially prepared form with a numerical score of neurovegetative and psycho-emotional disorders.

For a diagnostics and form of groups of investigation anthropometry was used a body-weight index (BWI) – a ratio of a body weight in kilograms and a squared length of body in metres, was calculated (Crowley, 2017).

Kupperman Index on to 15 scores conforms to mild menopausal disorders, 15-29 scores – medium, and KI in 30 scores and more conforms to heavy clinical aspects of climacteric syndrome.

MPI against vegetovascular disorders 10-20 scores conforms to a weak level of their intensity, 21-30 – to medium, more than 30 scores – a heavy intensity of vegetovascular symptoms of CS; for psycho-emotional disorders MPI 1-7 scores conforms to a mild intensity, 8-14 scores – to medium, and MPI more than 14 scores conforms to heavy intensity of psycho-emotional disorders of climacteric syndrome.

In a series of events a fundamental test of a psychological status was leaded. An anxiety level was determined with help of a scale, which was proposed and adapted by M. Saks & R. Deckardt (1994), consists of two subscales: trait and state anxiety. These two scales offer the opportunity to evaluate a trait and state anxiety on a case by case basis and to express it in scores (Farage et al., 2017b). Both scales include 20 claims, which a patient

appraises by points. An amount of scores, which received during of claims evaluation about an absence of anxiety, was deducted from amount in ration of claims which characterize a presence of an anxiety (Verspyck & Sergent, 2006; Tsikouras et al., 2008). The number 50 is added to a delta. If the result was 20-34 scores, a level of intensity had been evaluated as low, 35-45 scores – medium, and 46 scores and more – as a high level of intensity (Pope et al., 2017).

To determine emotional state a WAM methodology was used, which is based on interpretation of data which is received after completing a special prepared form by a patient. Each letter in a name of the form means a particular state of a person: W - wellbeing, A – activity, M – mood. A patient qualified her state from extra bad to extra good state on a basic of self-rating on 9-point scale. At the end of investigation received overall results were divided into 10 (on quantity of questions for each state) (Hermanns-Lê, Piérard-Franchimont & Piérard, 2017).

Check studies of a tempo of sensomotor reactions, a span, a sharing and an attention span were leaded using a time registration of correction task performance (crossing of letters on special blanks with the mark every 60 seconds and registration of time spending on a performance of all the task) and researching of numbers on Shulte`s tables.

In order to test hormonal state of examined women a determination of gonadotropic hormone (LH, FSH), sex hormone (estradiol, luteal hormone, testosterone) content was leaded with an immunoenzyme analyzer "STAT-FAX 303".

In order to examine a lipid exchange to determine a total cholesterol content (TCC), triglycerids in (TG), high density lipoproteins (HDL), LDL and very low density lipoproteins (VLDL) in a blood plasma and atherogenic index (AI). A content of TCC, TG, HDL in blood was determined with help of a biochemical semi-automatic analyzer "Humalayzer 2000 (Bartl & Bartl, 2017).

The content of LDL was calculated using a formula:

$$LDL = \text{Number of triglycerids} - VLDL - HDL \quad (1)$$

The content of VLDL was calculated by formula:

$$VLDL = (\text{Number of triglycerids} * 2{,}29)/5 \quad (2)$$

Atherogenic index was calculated by formula:

$$Ai = (\text{Number of triglycerids} - CH\ HDL)/CH\ HDL \quad (3)$$

For identification of cholesterol a standard solution of cholesterol in a concentration 1 mg/ml was used.

Indexes of a coagulating (F – fibrinogen; TT - thrombin time; PCC - prothrombin-converting complex; activated partial thromboplastin time (APTT); V and X tissue factors; TR - plasma recalcification time) and anticoagulating element of hemostasis (antithrombin, euglobulin lysis, a plasma tolerance to heparin) were determined on a spectrophotometer SF-46, a photoelectric colorimeter KFK-3, a unit "Reflolux". A determination of an aggregative thrombocytes activity was leaded with a photometric method during of their stimulation with an adenosinediphosphate (ADP), adrenalin, a ristomycin, determining in addition:

S – a platelet stickness; Aa – aggregative activity of platelets to adrenalin; Ar – to ristomycin; Aadp – to ADP (Anders et al., 2017).

An efficiency of therapeutic complexes was evaluated with using of difference method. For objectification of clinical impressions results at a comparative evaluation of efficiency of using HRT in the quality of a monotherapy and proposed by us therapeutic complexes was used a scoring method of clinical symptom complexes with an integrated index calculation of a pathology (IIP). Data about regression of psychoemotional (PE) and neurovegetative

(NV) evidences of CS was chosen criteria of therapy efficiency. Mentioned symptom complexes were estimated like 0 points if they were absent, 1 point at a mild level of their intensity, 2 – medium and 3 points – heavy.

Based on scores, IIP of each patient was calculated by formula:

$$IIP = \alpha_1 \sum PE + \alpha_2 \qquad (4)$$

where: α_1, α_2 – a frequency of evidences of symptom complexes, $\sum PE$, $\sum NV$ – amount of points of these evidences.

Evidences' frequency of every symptom complex was calculated by formula:

$$\alpha = \frac{T}{N} \qquad (5)$$

where: n – number of patients, which had even one of mentioned symptoms, N – a general number of women in a group. Amount of points of each symptom complex for every patient was calculated as an amount of separate available symptoms. A mend level (ML) of a disease pattern was determined too. It was calculated like a difference between two indexes of IIP. Received digital data was processing statistically with using of modern methods of a variation statistics with help of the program Excel Microsoft Office using for absolute numbers - Student test, with Bonferroni correction for testing of groups and paired Student test for repeated research results inside of a group, and for proportionate numbers – Fisher`s method of angular transformation. A difference between comparative measures was considered dependable if p<0,05. A correlation dependence of quantitative measures was studied with help Kendel's rank correlation coefficient calculation, and a correlation of qualitative measures – method of link measure calculation. Nonparametric methods were also used at small samples - Wilcoxon test for dependent and independent pluralities. For solving of performance tasks two groups of women at the age of 38-56 years were tested by us. The first group (basic) consisted of 196 patients with a surgical menopause; the second group (control) consisted of 152 women with a natural menopause. Women with a difficult pathology of an endocrine system, a locomotor system, tumours of genitals were read out of the test previously. Moreover, histopathlogical conclusion of got operated women were registered.

In the course of clinical and paraclinic evaluating of examined women a structure of both examined groups was analyzed taking into account social and medicobiologic factors in order to identify factors, which can influence on a process of perimenopause and for optimization of preventive and curative interventions.

Results and Discussion

A basic group and a control group were randomized on age, age of menopause, duration of perimenopause period (table 1). Thus, a mean age of women in a basic group equaled to 46,8±0,4 years, of a control group 47,3±0,6 years (p>0,05); age of menopause in a basic group equaled to 40,8±0,5 years; in a control group - 42,4±0,4 года (p>0,05); duration of perimenopause was according to 5,2±1,2 years – for a basic group, and 5,6±1,1 years for a control group (p>0,05). Groups also were checked against BMI: 28,4±1,4 kg/m2 – for a basic group, and for и 27,2±1,2 kg/m2 basics - kg/m2 – for a control group (p>0,05).

Table 1. Age and anthropometric data of examined women (M±T).

A group of women	n	Age (years)	Age of menopause (years)	Perimenopause (years)	ИМТ (kg/m)
Basic	60	46,8±0,4	40,8±0,5	5,2±1,2	28,4±1,4
Control	30	47,3±0,6	42,4±0,4	5,6±1,1	27,2±1,2

It is unascertained an appreciable difference between women of examined groups on level of education and employment pattern (tables 2, 3).

During of learning anamnesis it is identified by us (table 4), that 80,6% in a basic group pointed on a regularity of stressful situations in their life, that was much more frequently than in a control group - 41,4% (p <0,05).

Table 2. A level of education of examined women, absolute numbers (%)

A group of women	n	Education		
		High,%	Dual, %	Higher, %
Basic	60	46,9	41,3	10,0
Control	30	42,1	44,7	13,1

p>0,05

In the analyze of sex structures of examined group (table 5) it is noticed that women of a basic group noticed an irregularity of sex life (53,06%) much more frequently, than women of a control group.

Table 3. Frequency of stressful situations in anamnesis of examined women, absolute numbers (%)

A group of women	n	Stressful situations in anamnesis	
		There was little	Did not have
Basic	60	80,61a	19,3
Control	30	41,4	58,5

Table 4. A regularity of sex life of examined women, absolute numbers (%)

A group of women	п	Stressful situations in anamnesis	
		There was a little	Did not have
Basic	60	19(35,2)	42(64,8)
Control	30	14(46,72)	16(53,28)

Groups did not differ against each other essentially on a structure of available contraceptive methods (table 6). It should be emphasized that as well among women of a basic group, as in a control group such an ineffective and unphysiologic method of contraception, like coitusinterruptus, was widely used according to 17,86 and 14,47% (p <0,05).

Table 5. Contraceptive methods, used by examined women, absolute numbers (%)

A group of women	n	Contraceptive methods				
		Without a contraception	Rate method	Cotusnterrupttus	BMK	Peroral
Basic	60	26,0	10,2	17,86	34,17	11,73
Control	30	20,4	12,5	14,47	38,8	13,82

p>0,05

In relation to social habits, in particular, smoking, major differences between examined groups were not determined by us table 6).

Table 6. Specific gravity of smokers among of examined women, absolute numbers (%)

A group of women	n	Smoke	Do not smoke

Basic	196	28(14,29)	168(85,71)
Control	152	29(19,08)	123(80,92)

p>0,05

In relation to a somatic pathology in anamnesis of women of examined groups, that its frequency was considerably superior to a basic group in relation to a control group (table 7). Thus, women of a basic group have accurately a great frequency of cardiovascular and neurovascular changes (18,88 against 9,21%, p <0,05), neuropsychic diseases, (13,78 against 5,92%, p <0, 05), gastrointestinal issues (GI tract) (26,02 against 17,11% p <0,05), a pathology of locomotor system (17,86 against 9,87%, p <0,05) and respiratory tract infections (12,76 against 5,26%, p <0,05).

Table 7. Extragenital diseases of examined women, absolute numbers (%)

Extragenital diseases	A group of women Basic (n=196)	Control (n=152)
cardiovascular and neurovascular diseases	37(18,88)a	14(9,21)
neuropsychic diseases	27 (17,86)a	15 (9,87)
GI tract issues	27 (13,78)a	9 (5,92)
A pathology of locomotor system	51 (26,02)a	26 (17,11)
respiratory tract infections	25 (12,76)a	8 (5,26)
acute infectious diseases	52(26,53)	33(21,71)

p<0,05

In a structure of disturbances in menstrual cycle (table 8) of women of a basic group disturbances in the form of hypomenstrual syndrome (8,16 against 3,29%, p <0,05), algomenorrhea (18,88 against 12,5%, p <0,05), and premenstrual syndrome (32,14 against 21,05%, p <0,05).

Table 8. Incidence of gynaecological pathology in anamnesis of examined women, absolute numbers (%)

A group of women	n	Disturbances in a menstrual period	A pathology of vesical cervix	Benign neoplasm	Inflammatory diseases	Operations in anamnesis
Basic	196	74(37,76)a	59(30,1)	27(13,78)a	65(35,16)a	47(23,98)a
Control	152	37(24,34)	43(28,29)	8(5,26)	34(22,37)	9(5,92)

(p<0,05).

Table 9. A structure of disturbances of a menstrual function of examined women, absolute numbers (%)

Mode of disturbance	A group of women	
	Basic (n=196)	Control (n=152)
Uterine bleeding	33(16,84)	23(15,13)
Hypomenstrual syndrome	16(8,16)a	5(3,29)
Algomenorrhea	37(18,88)a	19(12,5)
Premenstrual syndrome	63(32,14)a	32(21,05)

The analyze of determination frequency of unspecified benign neoplasm of uterus and female gonads was 76,9% in the age category of 42-60 years.

During of a surgeon menopause changes, which happens in the organism 60-80% of women, have severe acute. Besides of innate psychoemotional, neurovascular

symptoms, 25% of women have a stable performance disturbance. Clinical symptoms of menopause disturbances of women of a basic group were:

flushes - 90,0%, higher hidrosis – 81,0%, sleep disturbance – 78,0%, affectability – 44,0%, decreased interest – 46,0%, feeling of pressure in a chest – 51,0%.

Women of a basic group have somatic pathology in anamnesis, in particular, cardio and neurovascular disturbances, neuropsychic diseases, GI tract issues, respiratory tract infections much more frequently. Women of examined groups have the largest frequency in a basic group in relation to a control group exactly in anamnesis. Thus, women of a basic group have larger frequency (17,8 agaist 9,7%, p <0,05) and respiratory tract infections (12,7 against 5,3%, p <0,05).

In a result of done somatic anamnesis of a basic and a control group it was determined: GI tract issues, and exactly cholecystitis (30,0% against 13,3% p <0,05), cardiovascular diseases (23,3% against 16,7%, p <0,05), lower extremity varicose vein disease - 20,0% against 23,3%, p <0,05; nodular goiter - 16,7% against 6,7%, p <0,05; diabetes mellitus - 13,3% against 6,7%, p <0,05.

Conclusion

Pathomorphological features of unspecified benign neoplasms of uterus and female gonads are analyzed in our researching with evaluating of a histological variant of neoplasm. So, double benign neoplasms of female gonads were met in 4th cases – 6,0%, others – 94,0% - neoplasm one of gonads of uterus. Macroscopic feature of neoplasms was following: leiodermatous unspecified benign neoplasms – 33,0%, with papilliferous ecphymas – 67,0 % of cases.

A structure of gynaecological pathology in groups of examined women was variegated too. Women of a basic group in anamnesis have more frequently than patients of a comparative group disturbances of a menstrual function (37,7% against 23,3%, p <0,05), inflammatory diseases of genitors (35,6% against 22,7%, p <0,05), benign neoplasms (13,8% against 5,6%>, p <0,05), but a quantity of women, which informed about gynecological surgeries, prevailed (23,8 against 5,9%, p <0,05). In a structure of a menstrual function disturbances of women of a vasic group prevailed: hypomenstrual syndrome (8,1% against 3,2%, p <0,05), algomenorrhea (18,8% against 12,5%, p <0,05) and premenstrual syndrome (32,1% against 21,5%, p <0,05).

Disclosure statement

No potential conflict of interest was reported by the authors.

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