

13. Kozłowska K, Foster SF, Linton J, Williams LM. Grey matter abnormalities in children and adolescents with functional neurological symptom disorder. *NeuroImage: Clinical*. 2017; 15:306-314. <https://doi.org/10.1016/j.nicl.2017.04.028>.
14. Matricardi S, Farello G, Savasta S, Verrotti A. Understanding Childhood Neuroimmune Diseases of the Central Nervous System. *Front. Pediatr*. 2019. <https://doi.org/10.3389/fped.2019.00511>.
15. WHO. Environment and the social determinants of health. <https://www.who.int/phe/ru/>

Реферати

ЗАХВОРЮВАНІСТЬ ТА ПОШИРЕНІСТЬ ХВОРОБ НЕРВОВОЇ СИСТЕМИ У ДІТЕЙ УКРАЇНИ

Волосовець О.П., Крючко Т.О., Кривоустов С.П.,
Гончарь М.О., Волосовець А.О., Стецюк Р.А.,
Логінова І.О., Хоменко В.Є., Щербинська К.М.,
Вербицький І.В.

У статті наведені клініко-епідеміологічні дані поширеності та захворюваності дітей на хвороби нервової системи в усіх областях України. Показники захворюваності на неврологічну патологію у дітей із території радіологічного контролю були більшими, ніж загальнодержавні та показники захворюваності у дітей з інших областей, що не дає можливості виключити прямий та опосередкований вплив радіаційного фактору. Результати наших спостережень свідчать, що у дітей, які зазнають тривалого впливу екотоксичних факторів, зокрема і радіаційного, спостерігаються більш високі рівні поширеності та захворюваності на неврологічну патологію, що потребує моніторингу фахівців та розробки ефективних лікувально-діагностичних заходів.

Ключові слова: діти, інвалідність, хвороби нервової системи, Чорнобильська катастрофа.

Стаття надійшла 31.08.2019 р.

ЗАБОЛЕВАЕМОСТЬ И РАСПРОСТРАНЕННОСТЬ БОЛЕЗНЕЙ НЕРВНОЙ СИСТЕМЫ У ДЕТЕЙ УКРАИНЫ

Волосовец А.П., Крючко Т.А., Кривоустов С.П.,
Гончарь М.А., Волосовец А.А., Стецюк Р.А.,
Логинова И.А., Хоменко В.Е., Щербинская Е.Н.
Вербицкий И.В.

В статье приведены клиничко-эпидемиологические данные распространенности и заболеваемости детей патологией нервной системы во всех областях Украины. Показатели заболеваемости неврологической патологией у детей из территории радиологического контроля были выше общегосударственных и показателей заболеваемости у детей из других областей, что не позволяет исключить прямого и опосредованного влияния радиационного фактора. Результаты наших наблюдений свидетельствуют, что среди детей, имеющих длительное воздействие экотоксических факторов, в том числе радиационное, наблюдаются более высокие уровни распространенности и заболеваемости неврологической патологией, что требует мониторинга специалистов и разработки эффективных лечебно-диагностических мероприятий.

Ключевые слова: дети, инвалидность, болезни нервной системы, Чернобыльская катастрофа.

Рецензент Похилько В.І.

DOI 10.26724/2079-8334-2020-3-73-37-42

UDC 618.11-006-02-036;616-006

M.A. Garashova

Azerbaijan medical University, Baku, Azerbaijan

POSTMENOPAUSAL PERIOD - AS A RISK FACTOR FOR THE DEVELOPMENT OF THE REPRODUCTIVE SYSTEM TUMORS

e-mail: Garashovam@mail.ru

The study included a retrospective analysis of the medical histories of 301 women with various tumors of the reproductive system (Average age 61.6 ± 0.4 years). The prospective study included 306 women with benign and malignant genital tumors in the postmenopausal period (Average age 59.3 ± 0.4 years). All patients underwent gynecological, ultrasonic, histological and blood biochemical examinations with the results of the study; endometrial markers CA-125 were determined. It was found that in patients with ovarian cancer, the body mass index was 28.7 ± 0.6 kg / m², in endometrial cancer 32.7 ± 1.0 kg/m², in benign ovarian neoplasms, the BMI was in the range of 27.3 ± 2.0 kg/m², in patients with endometrial hyperplastic processes 31.9 ± 0.8 kg / m². Patients with ovarian cancer and endometrial cancer had a high rate of artificial termination of pregnancy (29.2% and 46.8%, respectively). Thus, risk factors for the development of neoplastic processes of genitalia in postmenopausal period are: the increase in body mass index, presence of infertility in anamnesis, the presence of gynecological and endocrine diseases in the reproductive and perimenopausal periods, high frequency of induced abortion in anamnesis.

Key words: postmenopausal period, ovarian cancer, endometrial cancer, endometrial hyperplastic processes, body mass index.

The work is a fragment of the doctoral dissertation: "Pathogenetic mechanisms, clinic and modern methods of diagnostics of reproductive organ tumors in the postmenopausal period".

According to the research results, by 2030, 1 billion 200 million women will be in the postmenopausal period, and by 2060, the number of postmenopausal women will be approximately 59.8% of the total female population in the world [11]. The process of the ovaries functional activity extinction is accompanied by physiological hypoestrogeny and, accordingly, depletion of the ovarian follicular apparatus and apoptosis of germ cells (with the presence of spontaneous genetic breakdowns) [7, 8]. This process is physiological in nature and is a natural process of the body aging.

In 2011 the working group of STRAW experts determined the parameters of the female body's life periods [2]. It was found that 20% of women have peri - and postmenopausal periods have a physiological

course. 50% of women have hypoestrogenia, accompanied by climacteric disorders of varying severity and characterized by polymorphism of clinical manifestations [14, 9].

It is established that in the postmenopausal period in the structure of gynecological morbidity, pathological processes of the endometrium, including endometrial cancer, occupy one of the leading places. At the same time, in the postmenopausal period, the probability of endometrial cancer developing reaches 30% [5, 15].

According to recent studies, it has been determined that relative and absolute hyperestrogeny plays a significant role in the development of endometrial hyperplastic processes in the postmenopausal period. Hormonal rearrangement of women's body against the background of ovarian hypofunction is a predisposing factor for the development of endometrial cancer. It should be noted that in postmenopause, the presence of diffuse and focal changes in the endometrium is characterized by an asymptomatic course [6, 10].

The authors' study revealed that in the pathogenesis of endometrial neoplastic processes, with prolonged postmenopause, the value of hyperestrogenia as such decreases, and the role of other factors is under study.

In recent years, there has been a significant increase in the incidence of ovarian cancer. Peri- and postmenopausal periods are risk factors for ovarian cancer [1, 11].

It should be noted that there is limited and contradictory information about the pathogenetic mechanisms and risk factors for the development of tumors of the reproductive system in the postmenopausal period. There is no data on the severity of clinical manifestations, criteria for modern methods of diagnosis of neoplasia, as well as the structure of tumors of the reproductive system in the postmenopausal period in the Republic of Azerbaijan.

The purpose of the study was to determine the risk factors for developing genital tumors in the postmenopausal period.

Materials and methods. The study included a retrospective analysis of the medical histories of 301 women with various tumors of the reproductive system. The prospective study included 306 women with benign and malignant genital tumors in the postmenopausal period. All patients were treated at the Oncology Clinic of the Azerbaijan Medical University and the National Cancer Center of the Republic of Azerbaijan. The average age of the examined women included in the prospective study was 59.3 ± 0.4 years. According to a retrospective study, the age of women was in the range of 61.6 ± 0.4 years.

The duration of the postmenopausal period in patients included in the prospective study was in the range of 9.8 ± 0.4 years.

This study included conducting a clinical examination of patients, determining the severity of menopausal syndrome on the Kupperman scale. All patients underwent transvaginal ultrasound examination of the genitals, while evaluating the echographic parameters of the uterus, in particular the anterior-posterior size, length, width, and determination of the length, width, and thickness of the ovaries. According to ultrasound data, the size of the tumor was determined, and the thickness of the endometrium was measured. CT, MRI, and PET-CT examinations were also performed on the patients included in the study. In this study, a marker of carbohydrate metabolism, the F18-fluorodeoxyglucose radiopreparation, was used for PET. Indications for PET were: diagnosis of primary tumors of various locations, determining the prevalence of the process, the presence of metastases, planning radiation therapy and evaluating the effectiveness of antitumor therapy. PET studies were conducted at the center for Nuclear Medicine in Baku.

To study the informative value of hormone indicators in women with tumors of the reproductive system, indicators of FSH, LH, estradiol, estrone, DHEA-C, progesterone, testosterone and prolactin in the blood serum were determined. Hormonal studies were performed using enzyme immunoassay on the Roche Cobas E 411 device at the medical Plaza clinic in Baku. Blood biochemical parameters were also studied, including alanine aminotransferase (ALT), aspartate aminotransferase (AST), gamma-glutamyltransferase (GGT), creatinine, fasting glucose, total protein, urea, uric acid, residual nitrogen, alkaline phosphatase, cholesterol, and triglycerides. All patients were identified indicators of the cancer marker CA-125.

The obtained quantitative and qualitative data were subjected to statistical processing by special methods of medical statistics, taking into account modern requirements. The methods of variational, correlation, variance, discriminant, and ROC analyses were applied. Methods of variational statistics are used to analyze the obtained quantitative digital data. The average values of the obtained samples (M), their standard deviations (σ), standard errors (m), 95% confidence intervals (95% CI), minimum (min) and maximum (max) values of the series are calculated. To estimate the difference between the variational series, the parametric t-student criterion was previously used.

Results of the study and their discussion. In the study, the incidence of endometrial cancer was 16.3% (n=50). The stages of diagnosis of endometrial cancer according to the FIGO classification are shown in table 1.

Table 1

Stages of endometrial cancer diagnosis by FIGO (based on a prospective study)

Stages of endometrial cancer	Number of patients (n=50)	
	Abs.	%
Stage I (tumor within the body of the uterus)	34	68
- IA (the tumor is limited to the endometrium, or invaded the myometrium by < ½ thickness)	21	42
- IB (the tumor is invaded in the myometrium by > ½ thickness)	13	26
Stage II (the tumor sprouts the stroma of the cervix, but does not extend beyond the uterus)	15	30
Stage III (metastases in pelvic lymph nodes)	1	2

In endometrial cancer in the postmenopausal period, 68% of patients have a tumor detected at stage I, 30% of patients-at stage II, and only 2% of patients at stage III of the tumor process. According to a retrospective study, the incidence of endometrial cancer in the postmenopausal period was 21.6%. In 86.2% of cases, endometrial cancer was diagnosed at the first stage of development of the tumor process.

The study found that the average age of patients with ovarian cancer was 59.1±0.5 years. The average age of patients with endometrial cancer was 62.4±1.0 years. In patients with endometrial hyperplastic processes, the age index ranged from 58.9±0.9 years, in patients with uterine fibroids from 55.1±0.2 years. The age of patients diagnosed with benign ovarian neoplasms was 62.3±1.1 years.

The study of the age factor in the Genesis of tumors of the reproductive system suggests that the postmenopausal period itself, against the background of significant neurohormonal changes in the female body, is a high risk factor for the development of neoplasms.

The age of ovarian cancer patients included in this study ranged from 48-77 years. There is a high risk of ovarian cancer in women over 55 years of age. The peak of endometrial carcinoma occurs at the age of 70–74 years, which allows us to consider the age of a woman and the duration of the postmenopausal period as high risk factors for the development of genital neoplasms.

Analysis of the results of a prospective study revealed that ovarian cancer in the postmenopausal period was diagnosed in 66% of cases at stage III of the tumor process, in 15.5% at stage I, and in 10.3% at stage IV of the tumor process. This is often due to the asymptomatic course of the disease or the presence of non-specific symptoms.

The study of the frequency of complaints in patients with ovarian cancer is presented in table 2.

Table 2

The frequency of complaints in patients with ovarian cancer in postmenopausal women

Complaints	Abs.	%
Pain	85	87.6
Spotting	2	2.1
Bleeding from the genital tract	2	2.1
The increase in the volume of the stomach	70	72.2
Fatigability	50	51.5
Dysuric phenomena	33	34.0
Difficulty breathing	19	19.6
Ascites	54	55.7
Constipations	3	3.1
Increased blood pressure	71	73.2
Sleep disturbance	78	80.4

As a result of the study, it was found that out of 97 patients with ovarian cancer, 18 (18.6%) patients with ovarian cancer had a combination of the underlying disease with other genital tumors, the frequency of which is shown in table 3.

Table 3

The rate of increase of ovarian cancer with other tumors of the genitalia in postmenopausal women

Concomitant tumors	Ovarian cancer (n=18)	
	Abs.	%
Hysteromyoma	13	72.2
Diffuse endometrial hyperplasia	3	16.7
Endometrial polyp	2	11.1

According to the results of this study, the frequency of combination of endometrial hyperplastic processes with other genital tumors was 35.4%. Endometrial hyperplastic processes are most often combined with uterine myoma, the frequency of which ranges from 72.7% to 100% in this group of patients. In postmenopausal women, the frequency of combination of uterine fibroids with concomitant genital tumors was determined in the range of 38.3%. Diffuse endometrial hyperplasia (83.3%), ovarian tumour-like formations (1.1%) and focal endometrial hyperplasia (5.5%) were most frequently detected in patients with uterine fibroids.

The study of the body mass index revealed that in patients with ovarian cancer, the body mass index was 28.7 ± 0.6 kg / m². The body mass index for endometrial cancer was in the range of 32.7 ± 1.0 kg / m². For benign ovarian neoplasms, the BMI of patients was within 27.3 ± 2.0 kg / m². BMI in patients with endometrial hyperplastic processes in the postmenopausal period was 31.9 ± 0.8 kg / m². Of 34 patients with diffuse endometrial hyperplasia without atypia, 20 (58.8±8.4%) had various degrees of obesity. The rate of grade I obesity was $29.4 \pm 7.8\%$ (n=10), grade II frequency was within $17.6 \pm 6.5\%$ (n=6), and grade III obesity rate was $11.8 \pm 5.8\%$ (n=4). In atypical endometrial hyperplasia, the frequency of obese patients was slightly higher and amounted to $66.7 \pm 12.5\%$ (n=10). In patients with endometrial polyp, this indicator was $68.8 \pm 11.6\%$ (n=11). In patients with progressive growth of myomatous nodes in the postmenopausal period included in our study, the BMI was 29.5 ± 0.9 kg / m² and ranged from 19 to 44 kg/m². The results obtained allowed us to determine that in patients with genital tumors in the postmenopausal period, there is an increase in BMI indicators, reflecting the presence of changes in body weight and obesity of varying severity. At the same time, the maximum BMI values were observed in patients with endometrial pathologies, including endometrial cancer. Obesity has been found to be a high risk factor for endometrial cancer in women over 30 years of age. An increase in BMI increases the likelihood of developing endometrial cancer by 5 times.

In patients with ovarian cancer, the features of menstrual, reproductive and generative functions were studied. It was found that the average age of menarche was 13.2 ± 0.2 years. At the same time, 77.3% of patients had regular menstruation, and 22.7% had irregular menstrual cycles. The study of the history of patients with ovarian cancer revealed a high frequency (29.2%) of artificial termination of pregnancy. It should be noted that 91.8% of patients had more than 4 pregnancies, of which 64.4% of pregnancies ended in term delivery.

The study showed that the menstrual, reproductive and generative functions of the examined patients did not directly affect the risk of ovarian cancer. At the same time, the high rate of artificial termination of pregnancy seems to be a risk factor for ovarian cancer. One in three patients with ovarian cancer had a history of induced abortions.

The study of the obtained data revealed a relatively high frequency of gynecological diseases in the reproductive period (16.5%). Among gynecological diseases, ovarian cysts prevailed, the frequency of which was 56.3%. This suggests that ovarian tumours are a risk factor for ovarian cancer. The structure of gynecological operations in the reproductive period in patients with ovarian cancer in postmenopause is shown in the fig. 1.

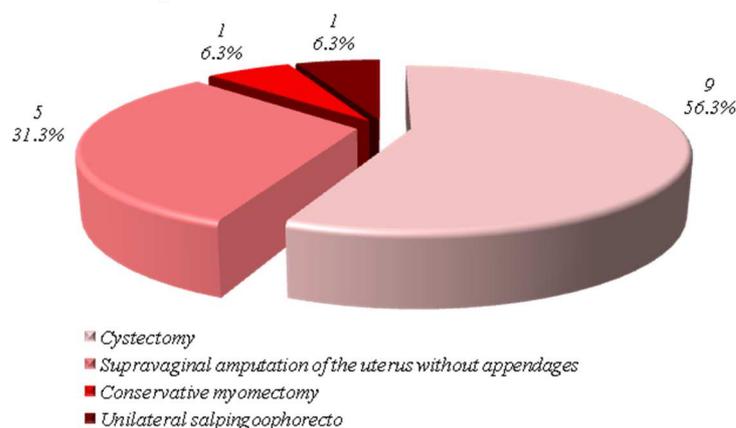


Fig. 1. The structure of gynecological surgery in the reproductive period in patients with ovarian cancer in postmenopausal women.

The study of the frequency of surgical interventions allowed us to establish that the frequency of surgical interventions for extragenital pathology in postmenopausal ovarian cancer patients was 18.6%.

The frequency of gynecological operations in the reproductive period in patients with ovarian cancer was 16.5%.

The results obtained allow us to state that the presence of tumor processes in the reproductive system and surgical interventions are an unfavorable background for the development of neoplastic processes in the postmenopausal period.

In postmenopausal patients with endometrial cancer, menstrual function was within the range of physiological fluctuations in the reproductive period. The study of the features of reproductive function allowed us to establish the presence of 4 or more pregnancies in 55.3% of patients. At the same time, in the anamnesis of these women, there was a high frequency of artificial termination of pregnancy, 46.8% of patients had a history of 2 or more abortions.

It should be noted that 14.9% of patients with endometrial cancer in the postmenopausal period had primary infertility, which was the reason for long-term hormone therapy.

Studies of reproductive function in patients with endometrial hyperplastic processes revealed that 85.5% of women had a history of high birth rate, of which 100% of women had artificial abortions. The frequency of infertility in this group of patients was 5.2%. There was no delivery in 14.5% of patients with pregnancy. It is important to have a history in patients with postmenopausal hyperplastic processes of episodes of recurrent endometrial hyperplasia in the reproductive period, which is a consequence of hormonal imbalance. This pathology of the reproductive period was observed in the anamnesis of every fifth patient from this group. A relationship was established between the number of pregnancies, childbirth and the risk of endometrial cancer in later life of women.

The relationship between a woman's age during the first pregnancy and the development of endometrial cancer was also established. Young pre-pregnant women are susceptible to developing endometrial cancer in later life.

Research conducted by the SGO (Society of Gynecological Oncology) working group on endometrial cancer has shown a steady increase in the incidence of endometrial cancer in older women. At the same time, the rate of diagnosis of endometrial cancer in the early stages is 75%. The average age of endometrial cancer diagnosis is 60 years. At the same time, it was found that the frequency of this pathology in people of Caucasian nationality significantly exceeds similar indicators in women of the African-American race [12]. Women who go through menopause after age 55 are at risk for developing ovarian, uterine, and breast cancer. The risk also increases with menarche before the age of 12. This is due to the fact that women who menstruate more than the average norm have a higher number of ovulations throughout their life and, consequently, are exposed to more estrogens. The greater the exposure to estrogens, the greater the risk of developing uterine and breast tumors; the greater the number of ovulations, the higher the risk of ovarian cancer [12, 13]

In recent years, according to scientific research, there is a clear relationship between body mass index, age, and in particular the development of endometrial cancer in women with long-term postmenopause. There was also an increased probability of ovarian cancer in unborn women, as well as in women with a history of artificial termination of pregnancy [5, 7]

Conclusion

It was found that risk factors for the development of neoplastic processes of genitalia in postmenopausal period are peri - and postmenopausal periods, the increase in body mass index, a longer duration of postmenopausal period, the presence of infertility in anamnesis, the presence of gynecological and endocrine diseases in the reproductive and perimenopausal periods, high frequency of induced abortion in anamnesis.

References

1. Chernobay A. Rak yaichnikov: patogenez, diagnostika, sovremennye aspekty lecheniya. *Visnyk problem biolohiyi i medytsyny*. 2013; 2 (100): 33–38. [in Russian]
2. Chestnova G, Kulyushina E, Abashin V, Efimenko N. Osobennosti diagnostiki giperplasticheskikh processov v endometrii u zhenshhin v period dlitelnoy postmenopauzy. *Klinicheskaja Meditsina*. 2013; 9: 46–47. [in Russian]
3. Sheshukova N, Makarov I. Otsenka funktsionalnogo statusa slizistoy obolochki tela matki u patsientok s giperplasticheskimi processami endometriya. *Akush. i ginekol.* 2012; 2: 72–75. [in Russian].
4. Antunes A, Andrade L, Pinto G. Is the immunohistochemical expression of proliferation (Ki-67) and apoptosis (Bcl-2) markers and cyclooxygenase-2 (COX-2) related to carcinogenesis in postmenopausal endometrial polyps? *Anal.Quant.Cytol.Histol.*, 2012; 34(5):264–72.
5. Bonadona V. Cancer risks associated with germline mutations in MLH1, MSH2, and MSH6 genes in Lynch syndrome. *JAMA*, 2011; 35 (22) : 2304–2310.
6. Brinton L, Felix A. Cancer progress and priorities: uterine cancer. *Cancer Epidemiol Biomarkers Prev.* 2018; 27(9): 985–994. doi: 10.1158/1055-9965.EPI-18-0264
7. Crosbie E, Roberts C, Qian W, Swart A, Kitchener H. Body mass index does not influence post-treatment survival in early stage endometrial cancer: results from eh MRC ASTEC trial. *Eur.J.Cancer.* 2012; 48: 853–864.
8. Khatun S. Menopause and Gynecological Malignancy. *J. South Asian Federation of Menopause Societies.* 2013; 1(2):75–79.
9. Kim M, Im Sun-Wha, Park H. The Demographic Changes of Menopausal and Geripausal Women in Korea. *JBM.* 2015; 22: 23–28. <http://dx.doi.org/10.11005/jbm.2015.22.1.23>
10. Kobayashi H, Tanase Y, Kawaguchi R, Takahama J. Factors that Differentiate between Endometriosis-associated Ovarian Cancer and Benign Ovarian Endometriosis with Mural Nodules. *Magn Reson Med Sci.* 2017; 3 :231–237 <https://doi.org/10.2463/mrms.mp.2016-0149>.
11. La Vecchia C. Ovarian cancer: epidemiology and risk factors. *Eur.J. Cancer.Prev.* 2017; 2 (1): 55–62.
12. Lee A, Ness R, Roman L, Terry K. Association Between Menopausal Estrogen-Only Therapy and Ovarian Carcinoma Risk. *Am.J. Obstet.Gynecol.* 2016; 127 (5): 828–836.
13. Santoro N, Taylor E. Reproductive hormones and the menopause transition. *Obstet.Gynecol.Clin.North Am.* 2011; 38(3): 455–466.
14. Sioban D.H, Margery G, Janet E. Executive summary of the stages of reproductive aging workshop + 10: addressing the unfinished agenda of staging reproductive aging. *Menopause. The Journal of The North American Menopausal Society.* 2012; 19 (4) :1–9

15. Smith E, Yeasky T, Wei J, Miki R, Cai K, Smedberg J. White spotting variant mouse as an experimental model for ovarian aging and menopausal biology. *Menopause*. 2012; 19:588–596. doi:10.1097/gme.0b013e318239cc53.

Реферати

ПОСТМЕНОПАУЗАЛЬНИЙ ПЕРІОД ЯК ФАКТОР РИЗИКУ РОЗВИТКУ ПУХЛИН ОРГАНІВ РЕПРОДУКТИВНОЇ СИСТЕМИ

Гарашова М.А.

У дослідження було включено ретроспективний аналіз історій хвороби 301 жінки з різними пухлинами органів репродуктивної системи (Середній вік $61,6 \pm 0,4$ року). У проспективне дослідження було включено 306 жінок з доброякісними та злоякісними пухлинами геніталій в постменопаузальному періоді (Середній вік $59,3 \pm 0,4$ року). Всім хворим було проведено ехографію геніталій; вивчено рівні стероїдних гормонів і біохімічні показники крові; визначено показники онкомаркера СА-125. Було встановлено, що у хворих на рак яєчників індекс маси тіла склав $28,7 \pm 0,6$ кг / м², при раку ендометрія $32,7 \pm 1,0$ кг / м², при доброякісних новоутвореннях яєчників ІМТ був в межах $27,3 \pm 2,0$ кг / м², у хворих з гіперпластичними процесами ендометрія $31,9 \pm 0,8$ кг / м². У хворих на рак яєчників і рак ендометрія було виявлено високу частоту штучного переривання вагітності (29,2% і 46,8% відповідно). Таким чином, факторами ризику розвитку неопластичних процесів геніталій в постменопаузальному періоді є: збільшення індексу маси тіла, наявність безпліддя в анамнезі, наявність гінекологічних, ендокринних захворювань в репродуктивному і перименопаузальному періодах, висока частота штучного переривання вагітності в анамнезі.

Ключові слова: постменопауза, рак яєчників, рак ендометрія, гіперпластичні процеси ендометрія, індекс маси тіла.

Стаття надійшла 14.08.2019 р.

ПОСТМЕНОПАУЗАЛЬНИЙ ПЕРІОД КАК ФАКТОР РИСКА РАЗВИТИЯ ОПУХОЛЕЙ ОРГАНОВ РЕПРОДУКТИВНОЙ СИСТЕМЫ

Гарашова М.А.

В исследовании были включены ретроспективный анализ историй болезни 301 женщины с различными опухолями органов репродуктивной системы (Средний возраст $61,6 \pm 0,4$ года). В проспективное исследование были включены 306 женщин с доброкачественными и злокачественными опухолями гениталий в постменопаузальном периоде (Средний возраст $59,3 \pm 0,4$ года). Всем больным была проведена эхография гениталий; изучены уровни стероидных гормонов и биохимические показатели крови; определены показатели онкомаркера СА-125. Было установлено, что у больных с раком яичников индекс массы тела составил $28,7 \pm 0,6$ кг/м², при раке эндометрия $32,7 \pm 1,0$ кг/м², при доброкачественных новообразованиях яичников ИМТ был в пределах $27,3 \pm 2,0$ кг/м², у больных с гиперпластическими процессами эндометрия $31,9 \pm 0,8$ кг/м². У больных с раком яичников и раком эндометрия была выявлена высокая частота искусственного прерывания беременности (29,2% и 46,8% соответственно). Таким образом, факторами риска развития неопластических процессов гениталий в постменопаузальном периоде являются: увеличение индекса массы тела, наличие бесплодия в анамнезе, наличие гинекологических, эндокринных заболеваний в репродуктивном и перименопаузальном периодах, высокая частота искусственного прерывания беременности в анамнезе.

Ключевые слова: постменопаузальный период, рак яичников, рак эндометрия, гиперпластические процессы эндометрия, индекс массы тела.

Рецензент Ліхачов В.К.

DOI 10.26724/2079-8334-2020-3-73-42-46

UDC 616.89: 616.715: 614.88

G.Sh. Gasimzade

Azerbaijan A. Aliyev State Advanced Training Institute for Doctors (ASATID), Baku, Azerbaijan

METHODS OF RADIATION DIAGNOSTICS OF COMPLICATIONS IN COMBINED CRANIOCEREBRAL TRAUMA AND ABDOMINAL TRAUMA

e-mail: nauchnayastatya@yandex.ru

This article is devoted to one of the problems of medical radiation diagnostics of combined trauma. The specifics and features of instrumental monitoring of victims of combined craniocerebral and abdominal trauma were determined. The article presents data from a prospective survey of 142 victims of this type of injury. In some cases, patients with combined craniocerebral and abdominal injuries received x-rays of the abdominal organs. The number of victims surveyed was 42 (29,5%). Due to the difficulty of diagnosis associated with the condition of the victims and for more accurate research in the future, an ultrasound study was conducted for all. Carrying out the method of review radiography of the abdominal organs in victims with combined craniocerebral and abdominal injuries was difficult due to the condition of the patients. In case of combined cranio-abdominal trauma, ultrasound diagnostics and computer tomography examination of the brain and abdominal organs of the victims were performed. The sensitivity, specificity, and accuracy of these research methods were studied and proven, and their inclusion in the diagnostic algorithm was recommended.

Keywords: combined trauma, cranio-abdominal trauma, abdominal trauma, ultrasound, computed tomography,

The work is a fragment of a doctoral dissertation: "Prognostic value of modern methods of radiation diagnostics in severe combined injuries".

Injuries occupy one of the leading places in the structure of causes of death up to 40–45 years. The death rate from accidents and injuries is constantly growing and every year this increase is up to 1%. Despite the fact that only 8-10% of those admitted to hospital treatment are victims of combined trauma, the mortality rate for combined injuries is 70% [10, 12, 14].