

Features of Somatic and Gynecological Status in Women with Cervical Intraepithelial Neoplasia

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Abstract. In spite of significant advances in the diagnosis and treatment of cervical diseases, cervical pathology remains the most important problem in modern gynaecology. The study of patients' medical history, somatic and gynecological status may determine the risk factors of cervical intraepithelial neoplasia.

Objective. To study the history history, general health, and reproductive system organ status in female patients with cervical intraepithelial neoplasia in order to identify a risk group of women with this pathology.

Material of the study. The investigation was carried out at the Regional Perinatal Center of Samarkand where general clinical, gynecological methods were studied in 100 women diagnosed with CIN I-II-III (study group I). A control group (II) consisted of 50 women without cervical pathology. CIN was diagnosed by means of extended cervical video coloroscopy using a SCANNER video coloroscope with a computer and special software.

Results. Oncological history taking revealed that 40% of the patients in the first group and 32% of the patients in the second group had family history of oncological diseases - breast cancer, cervical cancer, gastrointestinal cancer.

Conclusions. Women of reproductive age require systematic physical examination because of the large number of somatic pathologies that may be the background to inflammatory genital diseases of viral and mixed etiology.

Key words: *cervical intraepithelial neoplasia, cervix, cytological examination, videocolposcopy, oncological disease, somatic pathology.*

Actuality.

Despite significant advances in the diagnosis and treatment of diseases of the cervix, its pathology remains the most important problem in modern gynecology. The study of the anamnesis, somatic and gynecological status of patients can determine the risk factors for the development of cervical intraepithelial neoplasia.

Material and methods. General clinical, gynecological methods of research were carried out in 100 women diagnosed with CIN I-II-III (main group - I). The control group (II) consisted of 50 women without cervical pathology. CIN was diagnosed using extended video colposcopy of the cervix using a SCANNER video colposcope with a computer and special software. Cytological examination was carried out in scrapings taken from the endo-and exocervix, the transition zone of the cervical canal. Additional research methods included pelvic ultrasound. In addition, the laboratory studied sex steroid and gonadotropic hormones, carried out a bacteriological study from the cervical canal, to diagnose sexually transmitted diseases, we used the enzyme immunoassay method, scraping from the cervical canal was analyzed by PCR. If there were indications for biopsy, a morphological examination of the biopsy material was performed.

Purpose of the study. To study the features of anamnesis, general health status and the state of the reproductive system organs in patients with cervical intraepithelial neoplasia in order to identify women at risk of this pathology.

Research results.

The mean age of the patients in both groups was 32.3 ± 0.2 and 29.5 ± 0.3 , respectively ($p < 0.05$). In terms of social status, the first group included 56% unemployed, 29% employees, 12% employed in agriculture, 3% students. The social status of the patients in the control group is presented as follows: 40% not working, 22% office workers, 18% employed in agriculture, 5% students. Inhabitants of the city in the first group were 58%, in the second - 50%. The remaining 42% and 50% of patients in both groups lived in rural areas. Thus, in terms of age, social status and place of residence, the patients of both groups were quite comparable. When collecting an oncological anamnesis, it was found that 40% of patients in the first group and 32% of patients in the second group had oncological diseases in the family - breast cancer, cervical cancer, cancer of the gastrointestinal tract.

The average age of the onset of menarche was 12.9 ± 1.1 years in the first group and 13.2 ± 0.5 in the second. There were no menstrual irregularities in 74% of women in the first group and 90% of women in the second group. At the same time, it should be noted that 19% of women in the first group had hyperpolymenorrhea before the diagnosis of CIN and 7% had dysmenorrhea. In 5 patients of the control group, menstrual irregularities manifested themselves in the form of scanty periods.

The average age at the onset of sexual activity in the patients of the main group was 16.8 ± 2.1 years, in the patients of the control group - 19.5 ± 2.5 years ($p < 0.05$). 49% of women in the first group were married and had regular sexual relations, 28% were not married but had a permanent sexual partner, 23% were married but did not have sexual relations for 2-3 years (husbands were outside the country). Among the patients of the control group, 92% of those examined were in stable marriage.

All patients in both groups had a history of pregnancy and childbirth. 51% of women in the main group and 36% in the control group had more than 2 births in the anamnesis ($p < 0.01$). 40% of women had artificial terminations of pregnancy by surgery, 12 of them having more than 2 abortions. More than 2 abortions were noted in 8% of women in the control group. The data obtained on the frequency of abortions in the surveyed women are presented in Table 1.

Table 1.
Termination of pregnancy in patients of both groups.

Group	Formal abortion		Spontaneous abortion		Failed abortion	Ectopic pregnancy	Total
	1	2 и более	1	2 и более			
I	28	12	3	2	5	-	50 (50%)
II	5	4	1	-	1	1	7 (14%)
Всего	32(21,3%)	16(10,7%)	4(2,7%)	2(1,3%)	6(4%)	1(0,7%)	57(38%)

The data shown in Table 1 indicates that patients with CIN had significantly more artificial and spontaneous abortions in the history than patients from the control group.

Table 2 shows the methods of contraception used by the surveyed women in both groups.

Table 2.
Contraceptive methods of surveyed women (%)

Groups	Methods of contraception				
	Navy	KOK	CHPK	Barrier	Not used
I	40%	16%	7%	15%	22%
II	32%	26%	12%	20%	10%
Total	56	29	13	25	27

It should be noted that 9 women in the first group, before the diagnosis of cervical disease, changed their contraceptives 2-3 times, which led to an increase in the number of unwanted pregnancies and artificial termination of pregnancy. Women in the main group used hormonal contraception 1.5 times less often, and IUD - 8% more often. All of the above appears to have led to an increase in gynecological morbidity in women with CIN. So, each of the examined patients had a history of 1-2 gynecological diseases. Information on the combination of CIN with other gynecological diseases is presented in Table 3.

Table 3.
Comorbidities of the genitals of patients with CIN.

Group	Nosological form						Total
	Vaginitis / Cervicitis	Endometritis / salpingitis	Cysts / OvarianCystomas	Uterine Fibroids / endometriosis	Infertility	DMC	
I	76%	38%	11%	39%	17%	5%	186(186%)
II	30%	10%	8%	2%	4%	-	27(54%)
Total	91(60,7%)	43(28,7%)	15(10%)	40(26,7%)	19(12,7%)	5(3,3%)	

Attention is drawn to the fact of a significant number of concomitant gynecological pathology in comparison with patients without cervical pathology. It should be noted that in the study group, 82% had a history of cervical pathology: 48% had cervical erosion, 12 had a polyp, 10% had CIN I-II, and 2% had leukoplakia. In the history of 17% of patients, various surgical interventions were noted - from diagnostic curettage of the uterine cavity for DMC to removal of the uterine appendages for ovarian cyst and endometrioid cyst. 6 women with primary infertility underwent diagnostic laparoscopy.

Inflammatory diseases of the pelvic organs, noted in almost all women of the main group, differed in a variety of pathogens. Chlamidia Trachomatis (in 78% of women in group I and 12% of women in group II, $p < 0.001$), Virus Herpes Simplex (10% and 2%, respectively, $p < 0.001$), Cytomegalovirus hominis (only in 7% of patients in the main group). As for HPV 16/18 and 31/33, this pathogen was found in 83% of patients in the main group and in 6% of patients in the control group ($p < 0.001$). Thus, in 88% of the patients of the main group, a combination of 2 more causative agents of inflammatory diseases was found. It should be noted that conducting a bacterioscopic examination of the vaginal contents in almost all patients of the main group revealed the second type - intermediate - smear.

Cervicitis found in 78% of women did not disturb the microbial landscape of the vagina. Moreover, these women had no subjective sensations from the lower genital tract. At the same time, 14% of patients in the control group had vaginal dysbiosis, and 30% had vaginitis.

During extended colposcopy, 60% of women in the main group showed signs of precancerous diseases - mosaic, punctuation (35%) and atypical vessels (25%).

When studying the general somatic status of patients with CIN, it was revealed that in 100 cases, 123 (123%) nosological forms were found, while in patients without cervical pathology - in 50 examined patients, somatic pathology was detected only in 19 (38%). Information on somatic pathology is presented in table 4.

Table 4.
Revealed somatic pathology in the examined women.

Group	Nosological form						Total
	Anemia	UTI	Thyroid disease	Chr. sinusitis	Chr. bronchitis	Gastrointestinal diseases	
I	56%	32%	11%	16%	4%	4%	123 (123%)
II	8 (16%)	1 (2%)	-	5(10%)	-	5(10%)	19(38%).
Total	64 (42,7%)	33(22%)	11(7,3%)	21(14%)	4(2,7%)	9(6%)	142(94,6%)

The presented data indicate a high incidence of inflammatory diseases in the main group of women, such as urinary tract infections, chronic gastritis and chronic sinusitis. The high incidence of anemia is an indicator characteristic of women of reproductive age in our region.

Thus, hereditary oncopathology was detected in 40% of women with cervical intraepithelial neoplasia. 26% of patients in the main group, even before the diagnosis of CIN, had menstrual irregularities, often manifested in the form of heavy and prolonged menstruation. The patients of the main group indicated an earlier onset of sexual activity in comparison with women from the control group (16.8 ± 2.1 years and 19.5 ± 2.5 years, respectively). Patients with a history of precancerous diseases of the cervix have a large number of both spontaneous and artificial abortions.

Despite the fact that these women were more likely to use the IUD as a contraceptive, 9% of them had a change of several contraceptives. Uterine fibroids and endometriosis, as well as benign tumors / tumor-like formations of the ovaries, were found in 50% of patients in the main group, and in 38% - inflammatory diseases of the pelvic organs. A high frequency of infectious agents was noted, while in patients with precancerous diseases of the cervix, there is a combination of chlamydial and viral infections. In the structure of somatic diseases in the main group, chronic inflammatory diseases of the respiratory and urinary system were much more common than in the control group. Colposcopic signs of CIN were mosaic, punctuation, and atypical vessels.

Conclusions.

1. Risk factors for the development of precancerous diseases of the cervix (in addition to the well-known) may be oncopathology in a hereditary history.
2. Patients of reproductive age who have an early onset of sexual activity, menstrual irregularities, frequent change of various contraceptives, concomitant uterine fibroids and endometriosis should be included in the examination group to identify pathology of the cervix.
3. Patients with CIN have an intermediate type of vaginal smear, do not complain of pathological leucorrhoea, which does not exclude the possibility of developing a precancerous disease.
4. Women of reproductive age need systematic medical examination due to a large number of somatic pathologies, which may be the background for the addition of inflammatory diseases of the genital organs of viral and mixed etiology.

Summary.

The aim of this study was to study the characteristics of the anamnesis, general health status and the state of the reproductive system organs in patients with cervical intraepithelial neoplasia in order to identify women at risk of this group.

What is known.

It should be noted that 9 women in the first group, before the diagnosis of cervical disease, changed their contraceptives 2-3 times, which led to an increase in the number of unwanted pregnancies and artificial termination of pregnancy. Women in the main group used hormonal contraception 1.5 times less often, and IUD - 8% more often. All of the above appears to have led to an increase in gynecological morbidity in women with CIN. So, each of the examined patients had a history of 1-2 gynecological diseases. Information about the combination of CIN with other gynecological diseases.

What's new.

Thus, hereditary oncopathology was detected in 40% of women with cervical intraepithelial neoplasia. 26% of patients in the main group, even before the diagnosis of CIN, had menstrual irregularities, often manifested in the form of heavy and prolonged menstruation. The patients of the main group indicated an earlier onset of sexual activity compared to women from the control group (16.8 ± 2.1 years and 19.5 ± 2.5 years, respectively). Patients with a history of precancerous diseases of the cervix have a large number of both spontaneous and artificial abortions of pregnancy. Despite the fact that these women were more likely to use the IUD as a contraceptive, 9% of them had a change of several contraceptives. In 50% of patients of the main group, uterine myoma and endometriosis, as well as benign tumors / tumor-like formations of the ovaries, were revealed, and in 38% - inflammatory diseases of the pelvic organs. A high frequency of infectious agents was noted, while in patients with precancerous diseases of the cervix, there is a combination of chlamydial and viral infections. In the structure of

somatic diseases in the main group, chronic inflammatory diseases of the respiratory and urinary system were much more common than in the control group. Colposcopic signs of CIN were mosaic, punctuation, and atypical vessels.

Study design.

A prospective, controlled clinical study was conducted at the Department of Obstetrics and Gynecology of the FPDO Samarkand State Medical Institute at the Regional Perinatal Center for the period from 2018 to 2020

References:

1. Azamova Z.Sh. Modern diagnostics of background and precancerous processes of the cervix as a prevention of malignancy / Z.Sh. Azamova // Practical gynecology: from new opportunities to a new strategy: theses of the international congress. Moscow, 2006, p. 7.
2. Azizovna, N.Z., Rubenovna, A.L. Changes in the microbiota of the birth canal when using an intrauterine contraceptive during abdominal delivery//European Journal of Molecular and Clinical Medicine. – 2020. – T. 7. – №. 7. – C. 614-624
3. Akhmedova, M. P. Evaluation of screening methods for detecting precancerous diseases of the cervix / MP Akhmedova, NB Ivanova // Practical gynecology: from new opportunities to a new strategy: abstracts of the international congress. Moscow, 2006, p. 16.
4. Bosch, A. Epidemiology of HPV and associated neoplasia: book of abstracts, HPV conference, Hannover, June 2-5, 2005 / A. Bosch. - Hannover, 2005. - 190 p.
5. Kholmuradova A.Sh., Zokirova N.I. Optimization of diagnostics and treatment benign cervical diseases in women of reproductive age world science № 4 (37) 2020 pg 498-506
6. Bazarova D. Some problems of counteracting crimes related to laundering of illegal proceeds in Uzbekistan Journal of Advanced Research in Dynamical and Control Systems. Volume 11, Issue 7, 2019, Pages 873-885
7. Ismailova, Z., Choriev, R., Ibragimova, G., Abdurakhmanova, S., & Abdiev, N. (2020). Competent model of Practice-oriented education of students of the construction profile. Journal of Critical Reviews. Innovare Academics Sciences Pvt. Ltd. <https://doi.org/10.31838/jcr.07.04.85>
8. Ismailova, Z., Choriev, R., Musurmanova, A., & Aripjanova, M. (2020). Methods of training of teachers of university on advanced training courses. Journal of Critical Reviews. Innovare Academics Sciences Pvt. Ltd. <https://doi.org/10.31838/jcr.07.05.85>
9. Ismailova, Z., Choriev, R., Salomova, R., & Jumanazarova, Z. (2020). Use of economic and geographical methods of agricultural development. Journal of Critical Reviews. Innovare Academics Sciences Pvt. Ltd. <https://doi.org/10.31838/jcr.07.05.84>
10. Isakov, A., Tukhtamishev, B., & Choriev, R. (2020). Method for calculating and evaluating the total energy capacity of cotton fiber. IOP Conference Series: Earth and Environmental Science, 614(1), 012006
11. Davirov, A., Tursunov, O., Kodirov, D., Baratov, D., & Tursunov, A. (2020). Criteria for the existence of established modes of power systems. IOP Conference Series: Earth and Environmental Science, 2020, 614(1), 012039
12. Obidov, B., Choriev, R., Vokhidov, O., & Rajabov, M. (2020). Experimental studies of horizontal flow effects in the presence of cavitation on erosion-free dampers. IOP Conference Series: Materials Science and Engineering, 883(1), 012051
13. Khasanov, B., Choriev, R., Vatin, N., & Mirzaev, T. (2020). The extraction of the water-air phase through a single filtration hole. IOP Conference Series: Materials Science and Engineering, 2020, 883(1), 012206
14. Shokhrud F. Fayziev The problem of social stigma during a pandemic caused by COVID-19 International Journal of Advanced Science and Technology Vol. 29, No. 7, (2020), pp. 660-664 <http://serisc.org/journals/index.php/IJAST/article/view/13965/7188>
15. Fayziyev Shokhrud Farmonovich Medical law and features of legal relations arising in the provision of medical services. International journal of pharmaceutical research Volume 11, Issue 3, July - Sept, 2019 P. 1197-1200 doi:10.31838/ijpr/2019.11.03.088 <http://www.ijpronline.com/ViewArticleDetail.aspx?ID=11016>
16. Bryanskaya Elena, Fayziev Shokhrud, Altunina Anna, Matiukha Alena Topical Issues of an Expert Report in the Process of Proving in a Criminal Examination. International Journal of Engineering and Advanced Technology (IJEAT) ISSN:

2249 – 8958, Volume-9 Issue-1, October 2019 5345-5349 DOI: 10.35940/ijeat.A2946.109119 <https://www.ijeat.org/wp-content/uploads/papers/v9i1/A2946109119.pdf>

17. FayzievShokhrud (2019) Legal Aspects of Transplantology in the Republic of Uzbekistan. Systematic Reviews in Pharmacy, ISSN: 0976-2779, Vol: 10, Issue: 2, Page: 44-47 doi:10.5530/srp.2019.2.08 <http://www.sysrevpharm.org//fulltext/196-1575419211.pdf?1586863081>
18. Tulaganova, G. Some issues of observance of international legal norms of fight against legalization of criminal incomes in the Republic of Uzbekistan *Journal of Advanced Research in Dynamical and Control Systems* 12(2 Special Issue), c. 143-155
19. Bekchanov D; Kawakita H; Mukhamediev M; Khushvaktov S; Juraev M. Sorption of cobalt (II) and chromium (III) ions to nitrogen- and sulfur- containing polyampholyte on the basis of polyvinylchloride /Polymers for Advanced Technologies 2021 <https://doi.org/10.1002/pat.5209>
20. Davron, B., Mukhtar, M., Nurbek, K., Suyun, X., Murod, J. Synthesis of a New Granulated Polyampholyte and its Sorption Properties. *International Journal of Technology*. Volume 11(4), pp. 794-803. ., (2020) <https://doi.org/10.14716/ijtech.v11i4.4024>
21. Mukhamediev, M.G., Bekchanov, D.Z. New Anion Exchanger Based on Polyvinyl Chloride and Its Application in Industrial Water Treatment. *Russ J Appl Chem* 92, 1499–1505 (2019). <https://doi.org/10.1134/S1070427219110053>
22. Mukhamediev, M.G., Auelbekov, S.A., Sharipova, Z.T. et al. Polymer complexes of gossypol and their antiviral activity. *Pharm Chem J* 20, 276–278 (1986). <https://doi.org/10.1007/BF00758817>
23. Ikramova, M.E., Mukhamediev, M.G., Musaev, U.N. Complexation of hydrazine- and phenylhydrazine-modified nitron fibers with iodine/ *Plasticheskie Massy: Sintez Svoystva Pererabotka Primenenie*, (12), стр. 41–45 (2004)
24. Gafurova, D.A., Khakimzhanov, B.S., Mukhamediev, M.G., Musaev, U.N. Sorption of Cr(VI) on the anion-exchange fibrous material based on nitron. *Russian Journal of Applied Chemistry*, 75(1), стр. 71–74, (2002)
25. Rustamov, M.K., Gafurova, D.A., Karimov, M.M. et al. Application of ion-exchange materials with high specific surface area for solving environmental problems. *Russ J Gen Chem* 84, 2545–2551 (2014). <https://doi.org/10.1134/S1070363214130106>