



COLPOSCOPIC FEATURES OF THE CERVIX IN PATIENTS WITH GYNECOLOGICAL DISEASES

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✓ Resume

The aim of this study was to study the state of the cervix in patients with various gynecological pathologies who applied to the scientific and advisory clinic of the Scientific and Practical Center for Obstetrics and Gynecology. The study included 1125 patients. Analysis of the results of histological examination of cervical biopsy specimens and their comparison with cytological data showed a rather high sensitivity and specificity of the PAP test. The PAP p test, colposcopy and biopsy of the cervix made it possible to timely diagnose precancerous diseases, which contributes to the prevention of such a formidable disease as cervical cancer.

Keywords: cervix, cervical cancer, colposcopy, precancerous diseases

GINEKOLOGIK KASALLIKLARGA CHALINGAN BEMORLARDA BACHADON BO'YNIDAGI O'ZGARISHLARINING KOLPOSKOPIK XUSUSIYATLARI

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✓ Rezyume

Ushbu tadqiqotning maqsadi akusherlik va ginekologiya ilmiy-amaliy markazi maslahat poliklinikasiga murojaat qilgan turli ginekologik patologiyalari bo'lgan bemorlarda bachadon bo'yni holatini o'rganish edi. Tadqiqotimizga 1125 bemor jalb etildi. Bachadon bo'ynidan olingan biopsiya namunalari gistologik tekshirish natijalarini tahlil qilish va ularni sitologik ma'lumotlar bilan taqqoslash PAP testining nisbatan yuqori sezuvchanligi va o'ziga xosligini ko'rsatdi. PAP test, kolposkopiya va bachadon bo'yni biopsiyasi usullari bachadon bo'yni rak oldi kasalliklarni o'z vaqtida tashxislash imkonini berdi, bu esa bachadon bo'yni saratoni kabi yomon sifatli o'smallarning oldini olishga yordam berdi.

Kalit so'zlar: bachadon bo'yni, bachadon bo'yni saratoni, kolposkopiya, saraton oldi kasalliklari

КОЛЬПОСКОПИЧЕСКИЕ ОСОБЕННОСТИ ШЕЙКИ МАТКИ У ПАЦИЕНТОК С ГИНЕКОЛОГИЧЕСКИМИ ЗАБОЛЕВАНИЯМИ

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✓ Резюме

Целью настоящего исследования явилось изучение состояния шейки матки у пациенток с различной гинекологической патологией, обратившихся в научно-консультативную поликлинику РСНПМЦ Акушерства и гинекологии. В исследование включены 1125 пациенток. Анализ результатов гистологического исследования биоптатов шейки матки и сопоставление их с данными цитологии показало достаточно высокую чувствительность и специфичность ПАП - теста. Проведение ПАП теста, кольпоскопии и биопсии шейки матки позволило своевременно провести диагностику предраковых заболеваний, что способствует профилактике такого грозного заболевания как рак шейки матки.

Ключевые слова: шейки матки, рак шейки матки, кольпоскопии, предраковых заболеваний



Relevance

Despite modern advances in the diagnosis and treatment of benign diseases of the cervix, cervical pathology remains a major problem in obstetrics and gynecology. Of particular relevance is the problem of diseases of the cervix in pregnant women. Every year, more than half a million women are diagnosed with cervical cancer, with about 200,000 deaths. Over the past 20 years, there has been a clear trend of "rejuvenation" of precancer and cervical cancer, which ranks first among all oncogynecological diseases in women under the age of 30 years.

Cervical cancer (CC) today ranks 4th among the most common forms of cancer, 2nd among malignant tumors of the female reproductive organs, second only to breast cancer, and 1st in terms of reducing a woman's life years [7]. According to the World Health Organization (WHO), annually in the world cervical cancer is diagnosed in 530 thousand women, which is 5% of all localizations, 8.5 million cases of CIN II-III, 22.8 million CIN I. About 266 thousand women every year dies from cervical cancer (data from GLOBOCAN, 2008), and every year the number of patients with cervical cancer is growing. By 2020, more than 1 million new cases of cervical cancer are predicted [8,9].

The main tasks of an obstetrician-gynecologist when examining the cervix are: not to miss cervical cancer during the initial examination of the patient, to identify a risk group for the occurrence of this disease, to prevent the occurrence of cervical cancer in patients observed for abnormal colposcopy or cytological changes. Observation, diagnosis and treatment of cervical pathology is the prerogative of outpatient clinics and women's clinics. It should be remembered that the development of cervical cancer is not a lightning-fast process that takes about 10-15 years. Specialists have the opportunity to prevent an increase in the incidence rate at the stage of precancer of the cervix due to timely early detection (cytological screening and HPV testing, if possible, colposcopy, biopsy) and adequate treatment of precancerous diseases of the cervix.

The informativeness of the diagnostic chain is constrained by the low sensitivity of colposcopy and the low level of conclusions of one or several researchers. Data from a meta-analysis of articles on the effectiveness of colposcopic studies show that for normal colposcopic pictures, this figure is 96%, for abnormal ones - 48%; with lesions of low severity (LSIL) - 69%, high severity (HSIL) - 82% [7]. The positive prognosis rate for colposcopy in the diagnosis of LSIL is 78%, in the diagnosis of HSIL - >91%. The sensitivity of conventional colposcopy for LSIL is 51%, for HSIL it is 63% [9] and 55% [7]. In the study by R. Pretorius et al. showed that 37% of HSIL lesions could be obtained by random biopsy from different quadrants of the cervix without colposcopy evidence of abnormalities.

Modern methods of diagnosis and treatment of diseases of the cervix undergo significant changes from year to year and are the subject of discussion. Noteworthy are patients with precancerous diseases of the cervix, who need specific recommendations for timely diagnosis and pathogenesis therapy in order to prevent possible malignant processes of the cervix. Since, as you know, the problem of cervical cancer (CC) continues to be the focus of attention of oncologists [1]. If today timely measures for the prevention and treatment of CC are not carried out, then from 2050, 1 million women will fall ill with CC every year in the world. In our country, as in all post-Soviet republics, there is no clear organized screening program aimed at preventing cervical cancer [3,5].

The leading role in the development of pathological processes of the cervix is assigned to the human papillomavirus (HPV). Currently, it is known that the implementation of oncogenic transformation takes time and is staged, therefore, CC is preceded by a long stage of dysplastic changes, which is characterized by gradual deformation of the epithelium layer from the basal layer to the surface, leading to the sequential occurrence of CIN I, II, III states. According to the terminology of the College of American Pathologists (CAP), oncogenesis of cervical cancer begins with mild dysplasia (LSIL), which then progresses to severe dysplasia (HSIL), precancer, cancer in situ, and invasive cancer [2,4]. The duration of oncogenesis enables doctors and patients to get ahead of the degree of dysplasia and the ability to achieve complete elimination of the layer of atypical cells along with HPV that has realized its oncogenic potential.

The aim of this study was to study the state of the cervix in patients with various gynecological pathologies who applied to the scientific advisory polyclinic of the Republican Specialized Scientific and Practical Center for Obstetrics and Gynecology.

Material and methods

The study included 1125 patients who, in addition to a gynecological examination, ultrasound of the genital organs, anamnesis and collection of complaints, were examined for the most common sexually transmitted infections, a smear for the degree of purity of the vagina, as well as colposcopy and cytology after appropriate preparation - a biopsy of the cervix for verification of the diagnosis.

Results and discussion

When studying the anamnesis, about half of all patients of the main group - 586 (52.1%) indicated various pathologies of the cervix in the past. Every fifth patient of the main group - 228 (20.3%) was subjected to various effects on the cervix. Almost all patients complained of constant discharge and dull pain in the lower abdomen from the genital tract during the last months.

The structure of the identified gynecological pathology is shown in Table 1.

Table 1 The structure of the revealed gynecological pathology in the examined abs. , (%)

Disease	n= 1125	
	n	%
Endometritis, inflammation of the uterus and appendages	551	48,97
Menstrual irregularity	219	19,5
Uterine fibroids, adenomyosis	128	11,4
Cysts and cystomas of the ovaries	182	16,2
Infertility	109	9,3
Vaginitis, bacterial vaginosis, fungal vaginitis	1125	100

Analysis of the identified gynecological pathology showed that every second patient of the main group suffered from various inflammatory diseases of the uterus and appendages - 551 (48.97%). Menstrual dysfunction was diagnosed in 219 (19.5%). Uterine fibroids and adenomyosis were verified in 128 (11.4%) patients. Almost all patients were diagnosed with colpitis of various etiologies and bacterial vaginosis.

The results of the examination for sexually transmitted infections by polymerase chain reaction showed (figure 1) that the most common pathology was ureaplasmosis - in 278 (24.7%) women, in 112 (9.95%) - chlamydia, in 89 (7.9%) - genital mycoplasmosis. Chlamydia in combination with genital ureaplasmosis was detected in 69 (6.1%) women, HPV was detected in 154 (13.7%) women.

All patients underwent complex treatment, including anti-inflammatory, antifungal, antibacterial therapy, taking into account the identified pathogen. The duration of the course of treatment depended on the nature of the identified disorders and concomitant gynecological pathology. The therapy was accompanied by local sanitation of the vagina with various vaginal suppositories. A three-stage local sanitation of the vagina and cervix was prescribed using three-stage therapy - at the first stage, Metostil vaginal suppositories at night, 1 suppository for 7 days, then clasin, 1 suppository every other day, only 3 suppositories, after clasin, pavisin, 1 suppository for 14 days. A prerequisite was the parallel examination and treatment of sexual partners.

After the treatment, in order to identify the pathology of the cervix, all examined women underwent extended colposcopy. Colposcopic data were interpreted according to the International Classification of Colposcopic Terms adopted at the VII World Congress of Colposcopy in 1990 in Rome and updated by the International Association for Cervical Pathology and Colposcopy in 2002. in Barcelona.

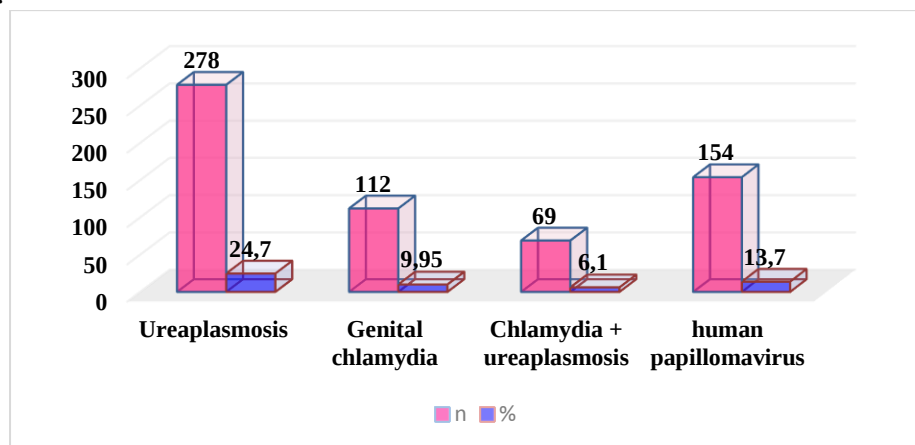


figure 1. The structure of bacterio-viral infection in the examined abs., (%)

Transformation zone types 1,2 and 3 were diagnosed in 224 (19.9%), 265 (23.6%) and 636 (56.5%), respectively. The vast majority of patients on colposcopy were diagnosed with signs of an atypical colposcopic picture: iodine-negative zones in the zone and outside the zone of transformation - in 224 (19.9%) and 636 (56.5%) cases, respectively. The second most common symptom was acetowhite epithelium in the transformation zone in 221 (19.6%) patients. Leukoplakia was often mild and occurred no less frequently - 386 (34.3%). Such signs of an atypical colposcopic picture as mosaic, puncture and atypical vessels were recorded with different frequencies: from 112(9.95%) to 698(62.0%). Particular attention should be paid to atypical vessels, which were registered by us in every fifth patient - 218 (19.4%), the diversity of vessels, their shape, branching, distance between them, as well as resistance to the sample with acetic acid attracted attention.

All examined patients underwent a cytological examination of smears using the Papanicolaou method. The results of the cytological study are shown in figure 2. Analysis of the results of cytological studies showed that only in every 10 patients the results of the PAP test were negative for intraepithelial smear lesions - reactive cell changes. The remaining 90% were diagnosed with intraepithelial lesions of varying degrees, both in the stratified squamous epithelium, the cylindrical epithelium of the cervix. Atypical squamous cells of unknown significance (ASCUS) were reported in 21 (1.9%) patients.

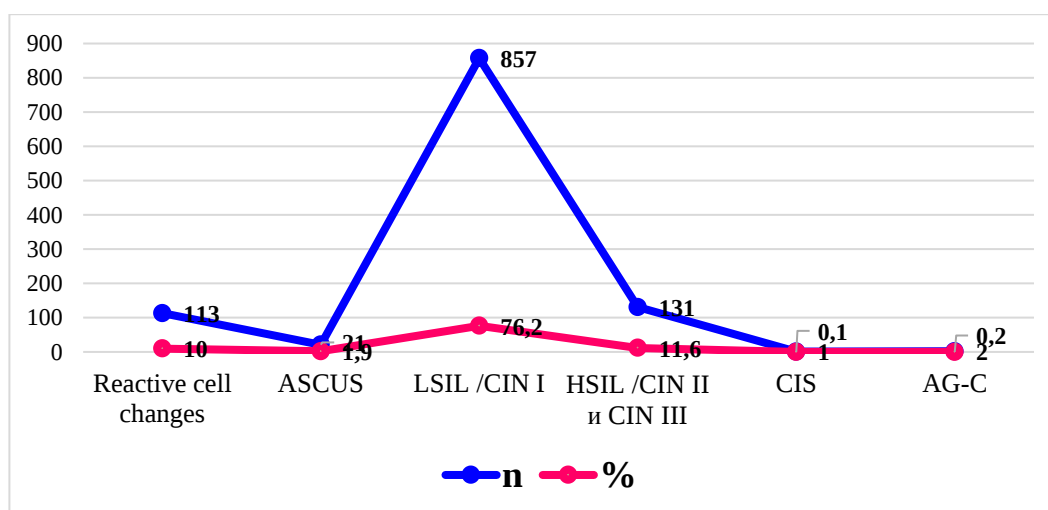


figure 2. The structure of cytological studies in the examined abs., (%)

This category of smears, according to many authors, deserves the close attention of doctors, and are subject to biopsy after a course of treatment and re-taking the PAP test. Since histological examination of biopsy specimens taken from these patients is often diagnosed with severe cervical dysplasia or squamous cell carcinoma of the cervix.

In more than half of the patients - 857 (76.2%), cytological smears revealed low-grade intraepithelial lesions - LSIL / CIN I. At the same time, stained smears showed damage in the cells of the intermediate and superficial layer of the stratified squamous epithelium. These lesions were characterized by a disproportionate increase in the size of the nucleus. Irregular contours and shapes of the nucleus, hyperchromia of the nuclei, binucleation, uneven condensation of chromatin, thickening of the nuclear membrane, anomaly in the number, size and shape of the nucleoli, a cytoplasmic cavity (koilocyte) were observed. Often observed koilocytic atypia, which is a cytological sign of the presence of HPV: koilocytes are irregularly shaped squamous epithelial cells with clear boundaries, the nuclei are hyperchromic, enlarged to varying degrees, the membrane is uneven, folded, the chromatin is often smeared, which gives the nuclei the appearance of ground glass.

High-grade squamous intraepithelial lesions (HSIL/CIN II-III) were diagnosed in 131 (11.6%) women. Microscopy of cytological smears in this category was characterized by changes mainly in the parabasal and basal layers of the stratified squamous epithelium, which in turn confirms the depth of the lesion. One patient was cytologically diagnosed with intraepithelial cancer (Cr in situ). Atypia of the glandular epithelium of the endocervix was found on the cytograms of 2 (0.2%) patients. Atypia of the

glandular epithelium was mainly characterized by the arrangement of cells in the form of feathers along the periphery, the accumulation of cells, the appearance of palisade-like and glandular structures.

Based on the results of the cytological study, 508 patients requiring biopsy were selected (Table 4). This group included women with the following category of cytological smears: ASCUS - 21 patients; LSIL/CIN I with a long course, all HPV positive patients with an abnormal colposcopic picture - 356 patients, as well as all 131 patients with HSIL /CIN II-III. Taking a biopsy was carried out by the method of radio wave surgery (RVS) on the apparatus "Fotek E 80 M" (Russia). The results of histological examination of cervical biopsy specimens are shown in Table 4.

Table 2 The structure of the results of histological studies

Histological diagnosis	Number of biopsies, n=508	
	n	%
Weak dysplasia	373	73,4
moderate dysplasia	85	16,7
severe dysplasia	44	8,7
CIS	6	1,2

Of 356 PAP smears with LSIL/CINI results, 352 (98.9%) biopsy specimens verified mild dysplasia of the stratified squamous epithelium, and 4 (1.1%) had moderate dysplasia. In 131 patients with HSIL/CIN II-III, 85 (64.9%) were histologically diagnosed with moderate and 50 (38.2%) with severe dysplasia of the stratified squamous epithelium of the cervix.

Thus, the analysis of the results of histological examination of cervical biopsy specimens and their comparison with cytological data showed a rather high sensitivity and specificity of the PAP test. The Pap test, colposcopy and biopsy of the cervix made it possible to timely diagnose precancerous diseases, which contributes to the prevention of such a formidable disease as cervical cancer.

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