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✓ *Resume*

*This article describes the results of simple and extended colposcopy, which was held among 242 women in reproductive age who consulted with different gynecological diseases. The result of the studies shows that 67,8% women had a different pathological change cervix of the uterus. Of them 24,4% women had not any complaints and clinical sign.*

*Keywords: colposcopy, base-line and pre-cancer diseases of cervix of the the uterus, diagnostics of diseases of cervix of the uterus.*

РАННЯЯ ДИАГНОСТИКА ФОНОВЫХ И ПРЕДРАКОВЫХ ЗАБОЛЕВАНИЙ  
ШЕЙКИ МАТКИ

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✓ *Резюме*

*В данной статье освещены результаты простой и расширенной кольпоскопии, проведённой у 242 женщин репродуктивного возраста, которые обращены с различными гинекологическими заболеваниями. Результат исследований показывает, что 67,8% женщины имели различные патологические изменения шейки матки. Из них 24,4% женщин не имели каких-либо жалоб и клинических признаков.*

*Ключевые слова: кольпоскопия, фоновые и предраковые заболевания шейки матки, диагностика заболеваний шейки матки.*

БАЧАДОН БЎЙНИ ФОН ВА РАК ОЛДИ КАСАЛЛИКЛАРИНИ ЭРТА ТАШХИСЛАШ  
УСУЛЛАРИ

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✓ *Резюме*

*Ушбу мақолада турли гинекологик касалликлар билан мурोजаат қилиб келган 242 нафар репродуктив ёшдаги аёлда ўтказилган оддий ва кенгайтирилган кольпоскопия текиширув натижалари ёритилган. Натижада 67,8% фоиз аёлда бачадон бўйнининг турли патологик ўзгаришлари аниқланди. Шулардан 24,4% фоиз аёлда ҳеч қандай шикоят ва клиник белгилар бўлмаган.*

*Калит сўзлар: кольпоскопия, бачадон бўйни фон ва рак олди касалликлари, бачадон бўйни касалликлари диагностикаси.*

## Relevance

The urgency of the problem of back ground diseases of the cervix is due to the widespread prevalence of pathology of the cervix, which occurs, according to V.N. Prilepskaya, in 10-15% of women of reproductive age. In addition, it is known that background disease processes can precede malignant neoplasms of the cervix, the incidence of which is currently, according to the research of M.N. Kostava [14], V.N. Prilepskoy has no tendency to decrease [14,15].

In recent years, there has been a steady increase in infectious and inflammatory diseases of the vagina and cervix in Uzbekistan, of which 23.2% are endocervicitis, in 30% of cases, manifestations of cervicitis are observed against the background of ectopia [3,8]. In inflammatory diseases, the processes of maturation and desquamation of the epithelium are disrupted, which creates conditions that predispose to the development of cervical dysplasia [1,13].

The presented data once again confirm that the cytological method of research is currently the leading one in the diagnosis of diseases of the cervix. Unfortunately, there is still a misconception among gynecologists about the danger of an in-depth cytological examination of the cervix in pregnant women due to possible complications of pregnancy [2,7].

Inflammatory diseases of the cervix uteri, accompanying most of the background processes, were regarded by many researchers as etiological factors of possible malignancy [4,11]. In the works of E.N. Kaukhova, A. Yu. Lugeva et al. [8] examined 2119 patients with various non-neoplastic diseases of the cervix (ectopia, simple leukoplakia, hypertrophy, cervical deformity, nabotovy cysts, endometriosis). Significance for the diagnosis and choice of a method for treating ultrasound of the pelvic organs, the use of PCR, cytological, bacterioscopic, bacteriological methods has been proven. In the studies of I.S. Sidorova, M.N. Zholobova et al. [17] found that in women of reproductive age with concomitant benign uterine diseases (uterine fibroids, adenomyosis and endometrial hyperplasia), cervical pathology is diagnosed in 48%. The research results of S.A. Levakova, A.G. Kedrova et al. [9] made it possible to draw the following conclusions: Modern colposcopic diagnostics at the primary gynecological admission is a highly informative screening method for moderate and severe cervical dysplasia, it reduces the time from diagnosis to treatment by 2-4 weeks, and also reduces by 1- 2 the number of visits to the doctor, with an average increase in the time for the initial examination up to 7 minutes. The sensitivity of the colposcopic method was 73.2%, the specificity was 64.1%, and its accuracy was 69%. In the presence of signs of invasion identified during colposcopy, the diagnosis coincided with the data of cytological examination in 80% of cases. Author Vaganova S.E. [6] proved the advantage of using Epigen intim spray for cryodestruction of genital warts. The effectiveness of galenophyllipt in burn erosion of the cervix was studied by the staff of the Institute of Toxicology under the scientific supervision of Doctor of Medical Sciences V.K. Sukhankina. On the model of cervical erosion, a comparative assessment of the efficacy of Galenofillipt and the registered drug Solkovagin manufactured by Solco Basel AG was carried out [6]. The main purpose of cytological research is to identify the morphological features of cells that characterize the pathological process. The method makes it possible to assess the structure and cellular level of tissue damage that have

fallen into the smear-imprint, and allows you to identify precancerous changes 3-5 years before the development of cervical cancer [5,10].

In the studies of I.S. Sidorova, M.N. Zholobova et al. [17] found that in women of reproductive age with concomitant benign diseases of the uterus (uterine fibroids, adenomyosis and endometrial hyperplasia), cervical pathology is diagnosed in 48%. According to the authors, the need for further study of causal factors, clinical manifestations, morphological and immunohistochemical features of cervical pathology in combination with uterine diseases becomes obvious in order to form a unified approach to diagnosis and treatment. The problem of diagnosing diseases of the cervix is due to their steady growth and a significant proportion in the structure of gynecological morbidity. According to T.A. Oboskalova, I.N. Kononova et al. [13] diseases of the cervix make up 61.2% in the structure of gynecological diseases. In 83% of cases, the pathology of the cervix is accompanied by a violation of vaginal dysbiosis and immune dysfunctions, which is consistent with the data of other researchers. Diagnosis of precancerous processes in the cervix is carried out in several stages. At the first stage, the primary examination of women is carried out, which includes a thorough history taking, physical examination, examination with gynecological mirrors, bimanual gynecological examination, colposcopy, smear cytology, analysis of vaginal smears to determine the flora [12,16].

Colposcopy (CS) is a highly informative, widely available and inexpensive method for diagnosing diseases of the cervix (CM), vagina, vulva, which significantly increases the efficiency of examining women with gynecological pathology. Along with other modern methods of examination, the CS allows you to choose the optimal ways of managing patients and monitor the state of the epithelium of the cervix, vagina and vulva in different physiological periods of women's life, it can be used repeatedly. The main task of CS is to identify precancerous conditions of the CM epithelium, which include dysplasia of stratified squamous epithelium (MPE) and endocervical glandular epithelium, which is initiated by the human papillomavirus (HPV) [9, 18].

Extended CS is the most effective and common technique - examination of the epithelium using various epithelial and vascular tests, in which the reaction of tissues in response to treatment with medicinal formulations is assessed. The technological chain of the KS

includes examination of tissues under different magnifications, using a filter, after treatment with solutions of acetic acid and Lugol. Each stage makes it possible to clarify colposcopic data, since the method is to a certain extent subjective and requires sufficient training and qualifications.

An important method for detecting cervical pathology is colposcopy with the establishment of suspicious areas for targeted biopsy. Colposcopy is a highly informative, affordable and inexpensive method for diagnosing diseases of the cervix, vagina, vulva, which significantly increases the efficiency of examining women with gynecological pathology.

**Purpose of the study.** Preclinical diagnosis of cervical diseases in women of reproductive age by colposcopic examination.

### Material and methods

During the period from 2018 to 2020, at the Bukhara Regional Perinatal Center, we examined 242 women who consulted with various gynecological diseases at the age of 18 to 46 years. All patients underwent a comprehensive preventive examination including the method of classical and extended colposcopy on a portable Digital Video Colposcope 1293 apparatus, manufactured by Promis Medical (Australia). Examined by a therapist. Anamnesis was carefully collected.

During colposcopy, the shape, size of the cervix and external os, the color and relief of the mucous membrane, the border of the squamous and cylindrical epithelium, and the features of the vascular pattern were determined. Photographing was carried out by an independent optical system, synchronously connected with a computer monitor.

An extended colposcopy was also carried out by applying a 3% solution of acetic acid to the vaginal part of the cervix, due to which pathological changes on its surface were more clearly identified. The action of the solution manifested itself in 30-50 seconds and lasted 3-4 minutes. After studying the colposcopic picture, the cervix was drained with a cotton swab and smeared with 3% Lugol's solution (Schiller's test). This method is based on the determination of the glycogen content in epithelial cells. Under the action of Lugol's solution, the mature squamous epithelium, rich in glycogen, turns dark brown. In precancerous and cancerous diseases, the cells are poor in glycogen and do not stain with Lugol's solution. In addition, areas of thinned squamous epithelium are not stained due to a sharp decrease in the thickness of the

intermediate layer and the inflamed mucous membrane.

To accomplish the tasks set in the work, the following methods were used when examining women.

- Clinical-visual method as one of the most common methods for diagnosing HPV infection.

- Extended colposcopy, which is a highly informative method, including examination and revision of the state of the mucous membrane of the cervix, vagina and vulva with a 7-8 times magnification with a microscope and the use of some tests, in which the reaction of tissues in response to their treatment with various medications is assessed means.

- The histological diagnostic method is the most accurate of all methods, but its use is limited in pregnant women.

- Bacteriological - the qualitative and quantitative composition of the microflora of the vagina, cervical canal, microbiological research; PCR diagnostics of urogenital infections, including chlamydia, mycoplasma, ureaplasma, herpes simplex virus (HSV), cytomegalovirus (CMV), as well as the detection of the general type of HPV and highly oncogenic and low oncogenic HPV strains.

- Cytological diagnostics, the use of which in women aged 18-46 years with an interval of 5 years can lead to a decrease in mortality from cervical cancer, was carried out using the Papanicolaou method (Rar test). When evaluating the results of a cytological study, the Papanicolaou classification was used, the most common classification of pathological examination of cervical smears, which has 5 types:

- Type I - absent atypical cells, normal cytological picture;

- Type II - a slight change in cellular elements is caused by the inflammatory process, manifested by a slight increase in the nucleus, the appearance of cells of metaplastic epithelium;

- Type III - there are single cells with changes in the ratio of the nucleus and cytoplasm, dyskaryosis, the diagnosis is not clear enough, a repetition of the cytological examination is required or a histological examination is necessary;

- IV type - individual cells with signs of malignancy are found, namely with enlarged nuclei and basophilic cytoplasm, uneven distribution of chromatin;

- V type - there are numerous atypical cells in the smear.

It is important to detect changes in epithelial cells during infection with PVI, coylocytes, dysparakeratosis.

### Result and discussion

As a result of the complex clinical and endoscopic examinations, 78 (32.2%) women turned out to be practically healthy. With methods 1 and 2, 164 (67.8%) women were diagnosed with certain diseases, including: exocervicitis in 44 (27%), endometriosis of the cervix in 9 (5.5%), pseudo-erosion and erosion of the cervix 35 (21.3%), cervical polyp in 6

(3.7%), simple and partially occluded ectopia in 20 (12.2%), old ruptures and scars of the cervix in 8 (4.9%), narrowing and clogging of the cervix in 5 (3%), papilloma of the cervix in 4 (2.4%), cervicitis caused by herpes and fungal infection in 29 (17.7%) (method 4), leukoplakia in 4 (2, 4%), 15 (9.1%) HPV and 9 (5.5%) HPV in pregnant women. Taking into account the clinical and echographic prognosis, women with significant discrepancies in the diagnosis were assigned to the group of active observation by a gynecological oncologist. (T. № 1)

**Table No. 1 Pathology detected during colposcopy**

№	Revealed pathology	Absolut	%
1	Exocervicitis	44	27%
2	Endometriosis	9	5,5%
3	Pseudo-erosion and erosion of the cervix	35	21,4%
4	Cervical polyp	6	3,7%
5	Ectopia	20	12,2%
6	Old tears and scars of the cervix	8	4,9%
7	Narrowing and overgrowth of the cervix	5	3%
8	Papilloma of the cervix	4	2,4%
9	Herpetic and fungal infection	29	17,7%
10	Leukoplakia	4	2,4%

The histological method was performed in all women. All women underwent Papanicolaou method (Pap test), 25 (15.2%) women had type I-II and type III-IV Pap test in 10 (6.1%) women.

Dark brown, homogeneous staining of the cervix and a normal colposcopic picture allowed these women to be classified as healthy. Often, pathological changes in the mucous membrane of the cervical canal were found in the presence of hypertrophy, scars, deformities of the vaginal part of the cervix. It is important to note that in 59 (24.4%) women, pathological changes in the

cervix were detected without any complaints and clinical signs, which proves the undoubted role of colposcopy in preclinical diagnosis of cervical diseases.

The results of the echographic examination of the examined women were entered into a special electronic database. When recording colposcopic data, the location of the revealed changes was taken into account. By dividing the cervix into 4 quadrants, all detected changes were indicated by the clock of the dial (for example, at 6 o'clock).



**Fig. 1. Patient W. 1990, Simple and extended colposcopy. Schiller's test.**

Taking into account the clinical and echographic prognosis, women with significant discrepancies in the diagnosis were assigned to

the group of active observation by a gynecological oncologist.

### Conclusions

Thus, colposcopy is recommended for widespread introduction into the practice of obstetricians-gynecologists for the purpose of complex diagnostic measures. Due to the use of digital video systems with software in modern colposcopes, the effectiveness of this diagnostic method increases significantly, which allows for adequate timely treatment.

Comprehensive diagnostic measures including colposcopy in polyclinics, gynecological hospitals, more in-depth studies carried out in specialized oncological institutions are promising and expedient, as it allows increasing the accuracy of diagnosing cervical diseases, conducting adequate timely treatment and providing secondary prevention of cervical cancer.

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