

DETECTION FREQUENCY OF SEXUALLY TRANSMITTED INFECTION AGENTS IN CHRONIC CERVICITIS

Khalilova Mekhriniso Tuymurodovna
Bukhara Medical Institute named after Abu Ali Ibn Sina.

Abstract. In patients with social and anamnestic risk factors for the development of cervicitis, the vaginal microbiome should be assessed and a test performed for the presence of a possible causative agent of inflammation.

Keywords: chronic cervicitis, reproductive age, treatment

Relevance. Inflammatory diseases of the genital tract are one of the most common reasons for patients to visit an obstetrician-gynecologist at a women's clinic. They occupy a leading place in the structure of gynecological pathology (up to 60.0%), [1,3,5,7,9,11,13]. Moreover, it is known that the cervix is one of the barriers preventing the penetration of the pathogen into the upper genital tract. This is due to the anatomical narrowness of the cervical canal, the presence of a mucous "plug" containing secretory immunoglobulin A, lysozyme and other substances with protective properties, as well as macrophages, neutrophils, T-lymphocytes in the lamina propria of the mucous membrane [2, 4, 6, 8, 10, 12]. However, according to some researchers, the cervix is often the first organ in the lower urogenital tract to become involved in the inflammatory process. This occurs as a result of damaging factors, particularly cervical trauma during childbirth, abortions, and medical and diagnostic procedures, as well as the affinity of some sexually transmitted infection (STI) pathogens for columnar epithelium, which leads to a decrease in the barrier function of the cervix and the development of inflammation. This allows for ascending infection of the upper genital tract, leading to complications such as infertility, miscarriage, an increased risk of fetal and placental defects, and complications after minor gynecological surgeries. Furthermore, the infectious factor is also considered a precursor to precancerous conditions and, possibly, cervical cancer.

Clearly, this problem has not only medical significance but also negative socioeconomic and demographic consequences. Early diagnosis and timely treatment of cervicitis help prevent further spread of infection, reduce the incidence of pelvic inflammatory diseases, and prevent their complications.

Objective of the study: To assess risk factors for the development of chronic cervicitis and develop an algorithm for the diagnosis and treatment of inflammatory cervical diseases.

Materials and methods: A clinical and laboratory examination and treatment were conducted on 150 non-pregnant women aged 18 to 45 years with complaints of mucous or mucopurulent discharge from the genital tract. The control group consisted of 50 patients of the same age who visited a doctor for a preventive examination. The study samples included cervical and urethral epithelial scrapings, as well as vaginal discharge. The following examination methods were used: direct (bedside) microscopy of native and stained urethral, vaginal, and cervical swabs; microscopy of Gram-stained swabs; assessment of the vaginal microbiota; microbiological methods for pathogen identification (PCR, culture diagnostics); cytological examination of cervical swabs; simple and extended colposcopy with targeted biopsy of cervical areas suspected of dysplasia, followed by histological examination of the biopsy specimens. Cervicitis was diagnosed based on complaints of vaginal

discharge, objective signs of inflammation (hyperemia, mucous or mucopurulent discharge from the cervical canal, a positive swab test), and a polymorphonuclear leukocyte count of more than 10 per field of view of a light microscope at 1000x magnification. The cytological examination was performed using epithelial scrapings from the ectocervix and cervical canal. To study the clinical characteristics of chronic cervicitis, we divided the patients into three groups. The two main study groups (Groups I and II) included 150 non-pregnant women with cervicitis (Group I) and 61 patients with acute cervical inflammation (Group II) and 89 patients with chronic cervicitis. The control group (Group III) included 50 non-pregnant women without cervicitis. Chronic cervicitis was more common in women aged 30-39 years ($57.3\pm 5.2\%$) and less common in women aged 17-29 years ($34.8\pm 5.0\%$). In women over 40, both acute and chronic cervicitis were observed much less frequently – in $3.3\pm 2.3\%$ and $7.9\pm 2.9\%$ of cases, respectively. In the control group (CG), the majority of women were 20-29 years old - $52\pm 7.1\%$, less common were women aged 30-39 years - $30\pm 6.5\%$. Among women without cervicitis aged 40 to 49 years, there were only 4 patients ($8\pm 3.8\%$).

These three groups of patients were approximately equal in terms of social status, education level, and social class. Age of onset of sexual activity is considered one of the risk factors for the development of infectious and inflammatory diseases of the cervix (14, 15). The results of our study are consistent with this concept. In the group of women with acute cervicitis, there were significantly more women who began sexual relations before the age of 18 ($63.9\pm 6.1\%$), compared with women with chronic cervicitis ($29.2\pm 4.8\%$) and women without cervicitis ($10.0\pm 4.2\%$) ($p < 0.001$). When comparing women with chronic cervicitis and practically healthy women, it was also found that among the former, there were significantly more women who began sexual activity before the age of 18 ($29.2\pm 4.8\%$ and $10.0\pm 4.2\%$, respectively) ($p < 0.01$). At the same time, in women who began sexual activity between the ages of 19 and 25, significant differences in the development of cervicitis were not found. After age 25, $14.6\pm 3.7\%$ of women with chronic cervicitis and $36\pm 6.8\%$ of women without cervicitis ($p < 0.01$) began having sex. The determining risk factors for developing cervicitis are frequent changes of sexual partners, their number, and the partner's sexual behavior. In patients with both acute and chronic cervicitis, the number of sexual partners in the past year was in most cases greater than five, accounting for $62.3\pm 6.2\%$ and $67.4\pm 5.0\%$, respectively. In the group of women without cervicitis, the majority of women had one sexual partner— $58.0\pm 7.0\%$. $21.0\pm 7.0\%$ of women had two or more sexual partners. Among women in Group I, other methods of contraception were withdrawal ($29.5\pm 5.8\%$), combined oral contraceptives (COCs) ($27.9\pm 5.7\%$), and spermicides ($11.5\pm 4.1\%$). In $26.2\pm 5.6\%$ of cases, patients with acute cervicitis did not use any method of contraception at all. The majority of women with chronic cervicitis ($38.2\pm 5.2\%$) used COCs as their primary method of contraception. The second most common method of contraception in Group II was withdrawal ($21.3\pm 4.3\%$). Intrauterine contraceptives and spermicides were used less frequently ($12.4\pm 3.5\%$ and $9.0\pm 3.0\%$, respectively).

In the control group (CG), the primary method of contraception was condom use by partners, accounting for $76.0\pm 2.9\%$. Women without cervicitis were less likely to use COCs ($14.0\pm 4.9\%$) and spermicides ($4.0\pm 2.8\%$). Analyzing the data obtained, it can be concluded that patients with chronic cervicitis in most cases used ineffective methods of contraception against STIs, focusing primarily on methods of contraception against unwanted pregnancy.

Conclusions. Based on a clinical and laboratory study, social and clinical-anamnestic risk factors for the development of acute and chronic cervicitis in non-pregnant women of reproductive age were

identified. The risk of developing cervicitis is higher in patients with an early onset of sexual activity, frequent changes of sexual partners, a history of intrauterine interventions, cervical trauma during childbirth, as well as chronic inflammatory diseases of the female genital organs and benign diseases of the cervix.

BIBLIOGRAPHY

1. Савельева И.В., Полянская И.Б. Возможности комбинированной терапии у больных бактериальным вагинозом в сочетании с кандидозным вульвовагинитом. Российский вестник акушера-гинеколога. 2016; 16; 3: 69-72. doi: 10.17116/rosakush201616369-72
2. Роговская С.И., Бебнева Т.Н. Доброкачественные заболевания шейки матки. В кн.: Шейка матки, влагалище, вульва. Руководство для практикующих врачей. Под ред. С.И. Роговской, Е.В. Липитовой. М.: Статус Презенс, 2014.
3. Руководство по амбулаторно-поликлинической помощи в акушерстве и гинекологии. Под ред. Радзинского В.Е. М.: ГЭОТАР-Медиа, 2015; 1054.
4. Khamdamova M.T., Zhaloldinova M.M., Khamdamov I.B. The state of nitric oxide in the blood serum of patients with cutaneous leishmaniasis // New Den Medicine. - Bukhara, 2023. - № 5 (55). - P. 638-643.
5. Khamdamova M.T., Zhaloldinova M.M., Khamdamov I.B. The value of ceruloplasmin and copper in the blood serum of women wearing copper-containing intrauterine devices // New Den Medicine. - Bukhara, 2023. - № 6 (56). - P. 2-7.
6. Khamdamova M.T., Khasanova M.T. Various mechanisms of pathogenesis of endometrial hyperplasia in postmenopausal women (literature review) // New Den Medicine. - Bukhara, 2023. - № 8 (58). - P. 103-107.
7. Khamdamova M.T., Akramova D.E. Genetic aspects of genital prolapse in women of reproductive age // New Den Medicine. - Bukhara, 2024. - № 2 (64). - P. 420-426.
8. Khamdamova M.T., Akramova D.E. Immediate and long-term results of surgical treatment of genital prolapse in elderly women // New Den Medicine. - Bukhara, 2025. - № 3 (77). - P. 201-207.
9. Khamdamova M.T., Akramova D.E. Efficiency of various methods of treatment of women with genital prolapse // News of dermatovenerology and reproductive health. - Tashkent, 2025. - № 2 (109). - P. 30-33.
10. Khamdamova M.T., Khasanova M.T. genetic mechanisms of development of endometrial hyperplastic processes in women in menopausal age // New Den Medicine. - Bukhara, 2025. - № 3 (77). - P. 207-211.
11. Khamdamova M.T., Khasanova M.T. Морфологические изменения эндометрия при гиперплазии // Новости дерматовенерологии и репродуктивного здоровья. - Ташкент. - 2025. - № 2 (109). - P. 12-14.
12. Khamdamova M.T., Umidova N.N. Генитальный эндометриоз – болезнь активных и деловых женщин // Новости дерматовенерологии и репродуктивного здоровья. - Ташкент. - 2025. - № 2 (109). - P. 33-44.
13. Khamdamova M.T., Akramova D.E. Генетические аспекты генитального пролапса у женщин репродуктивного возраста // New Den Medicine. - Bukhara, 2024. - № 2 (64). - P. 420-426.
14. Koreeva NV, Dobrokhotova YuE. The use of local cytokine therapy in obstetric and gynecological practice. Rossiyskiy Vestnik AkusheraGinekologa. 2018; 5: 13: 99-104.

15. Yakovleva S.V., Sidorenko S.V., Rafalsky V.V., Spichak T.V. Strategy and tactics of the rational use of antibiotics in outpatient practice: Russian practical guidelines. Presto Publishing House. 2018; P.121