

**ETIOLOGY AND TREATMENT, EPIDEMIOLOGY OF VAGINAL CANDIDIASIS
AND THIS CAUSES'S PATHOPHYSIOLOGY**

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Annotation: Vaginal candidiasis is a mycosis of the vaginal mucosa that occurs when it is colonized by strains of the yeast-like *Candida* fungi. In the acute stage, redness, swelling and itching of the vulva are noted; soreness, burning and itching in the vagina; abundant, curd-like discharge from the genital tract; in the chronic stage, dryness and atrophy of the mucous membrane, excoriation, pronounced lichenization. The diagnosis of vaginal candidiasis is established according to the clinical picture, microscopic and cultural studies. For vaginal candidiasis, systemic and local antimycotic agents, multivitamins, and immunostimulants are prescribed.

Key words: Vaginal candidiasis, mucous membrane, excoriation, pronounced lichenization.

Vaginal candidiasis, or thrush, is a type of vaginal fungal infection caused by microscopic yeast-like fungi of the genus *Candida albicans*. *Candida* infection is of great importance in obstetrics and gynecology due to the widespread and increasing incidence in recent years. Among vaginal infections, candidiasis is second only to bacterial vaginosis. Vaginal candidiasis usually affects women of childbearing age (pregnant women - 2-3 times more often), before the onset of menarche and in postmenopause it is rare. Yeast infection of the vagina can exist in the form of asymptomatic candidiasis and true vaginal candidiasis - acute (lasting up to 2 months) and chronic recurrent (lasting more than 2 months).

Reasons

Vaginal candidiasis is caused by conditionally pathogenic yeast-like fungi of the genus *Candida*, which live on the skin and mucous membranes of the oral cavity, gastrointestinal tract, external genitalia and vagina of healthy women. Changing growth phases (pseudomycelia and blastospores) allows fungi to survive in a wide temperature and acid range. The death of candida causes boiling for 10-30 minutes, treatment with formalin, copper sulfate, carbolic and boric acid. The presence of a mannoprotein shell and enzymes (proteinases and catalases) in fungi makes it easier to resist the immune system of the macroorganism.

The dominant pathogens of vaginal candidiasis (in 75-80% of cases) are strains of *C. albicans*, which have a high pathogenic potential. Vaginal candidiasis caused by other species (*C. glabrata*, *C. tropicalis*, *C. krusei*, *C. parapsilosis*) is more typical for certain ethnic groups (representatives of the African race) and geographical areas (the Mediterranean coast, the Middle East), which is associated with the specific microbiocenosis of mucous membranes and skin, nutrition and living conditions.

As a rule, vaginal candidiasis is an endogenous infection that develops in conditions of asymptomatic candidiasis, usually vaginal, less often - on the oral mucosa, intestines and skin. For example, the recurrent form of vaginal candidiasis is caused by the persistence of candida in the intestine and the periodic entry of the pathogen into the vagina and its colonization. In vaginal candidiasis, pseudomycelium candida usually penetrates only the surface layers of the vaginal epithelium, less often affects deeper tissues with subsequent hematogenic spread and damage to various organs.

The appearance of vaginal candidiasis contributes to the insufficiency of the host body's protective system, which is manifested by a decrease in the local immunity of the vagina. Local immunodeficiency against candida antigens (decreased activity of macrophages and lymphocytes) does not allow blocking fungal receptors and enzymes.

Vaginal candidiasis is usually not accompanied by a noticeable decrease in the level of lactobacilli and changes in the normal microflora of the vagina; however, when polymicrobial associations are formed, it can be combined with bacterial vaginosis.

The development of vaginal candidiasis is caused by a violation of the balance of sex hormones during pregnancy, taking hormonal contraceptives, and endocrine pathology. The effect of fluctuations in estrogens and progesterone on the vaginal mucosa is manifested by an increase in the concentration of glycogen in epithelial cells, stimulation of their sensitivity to candida and more effective adhesion of fungi. Vaginal candidiasis is much more often associated with various conditions associated with immunosuppression (HIV infection, diabetes mellitus, tuberculosis, hypovitaminosis, excessive use of antibiotics, corticosteroids, cytostatics, radiation therapy, etc.). Vaginal candidiasis can be associated with atopic manifestations (allergic rhinitis, food allergies).

Errors in nutrition, the use of hygiene products (pads, tampons), and wearing tight clothing are not considered significant factors in the development of vaginal candidiasis. There is a possibility of transmitting candida infection to a newborn through the birth canal of a sick mother; sexual infection is possible; the risk of infection is higher with frequent oral-genital contacts.

Symptoms of vaginal candidiasis

When candidiasis is not observed clinical manifestations, patients complaints, as a rule, do not present. In acute vaginal candidiasis, there are abundant thick white-gray vaginal discharge, curd-like appearance with a sour smell. The mucous membrane affected by vaginal candidiasis is swollen, hyperemic and prone to bleeding. It is marked by sharply delimited or merging with each other rounded and oval foci of curd-like plaque and films, ranging in size from dots to 5-7 mm in diameter. In the acute phase, the plaque is tightly attached to the mucosa and is hardly cleaned off with the exposure of a shiny eroded surface with a scalloped edge; later it is easily removed, secreting from the genital tract. Typical for vaginal candidiasis is itching and burning in the vulva, which increases during menstruation, after physical activity, water procedures. Patients are also concerned about sharp painful sensations during sexual intercourse.

In chronic vaginal candidiasis, there may be no characteristic discharge, slight hyperemia of the mucous membrane, scanty films and dry erosions, pronounced lichenization and excoriation. The mucous membrane becomes flabby, atrophic, the entrance to the vagina narrows, hemorrhagic rashes may appear. The chronic form has a long multi-year course.

Vaginal candidiasis usually spreads to the external and internal genitalia, urethra with the development of candida vulvovaginitis, cervicitis and urethritis. Vaginal candidiasis can

cause termination of pregnancy (spontaneous miscarriage, premature birth), the development of endometritis in the postpartum period, and infertility.

Diagnosis of vaginal candidiasis

The diagnosis of vaginal candidiasis is confirmed by the presence of clinical signs of infection and the isolation of fungal culture from the vaginal mucosa during microbiological examination. Examination of the cervix and vagina with the help of mirrors reveals hyperemia, swelling of the mucous membrane, gray-white cheesy deposits in its folds. When painted with Lugol's solution, small-point inclusions and a pronounced vascular pattern appear. Discharge from vaginal candidiasis is found in about 76% of cases, pruritus-in 32%. Microscopic examination of the smear reveals round-oval, sometimes budding cells. When backseeding on Saburo medium, convex shiny white colonies of rounded shape are found. Specific identification of fungi and determination of their sensitivity to drugs, complex PCR diagnostics and ELISA for STI pathogens are performed. If necessary, the examination is supplemented with a bacteriological examination of urine and urethral smear for microflora, fecal analysis for dysbiosis, blood sugar determination, ultrasound of the pelvic organs, abdominal cavity and bladder.

Treatment and prevention of vaginal candidiasis

Complex treatment of vaginal candidiasis includes exposure to the pathogen - *Candida* fungi, elimination of provoking factors, and therapy of concomitant pathology.

Various groups of antifungal agents are used systemically and topically for vaginal candidiasis: polyene antibiotics (nystatin, natamycin), imidazole and triazole antimycotics (clotrimazole, ketoconazole, fluconazole, itraconazole). Good results in the treatment of vaginal candidiasis are shown by fluconazole, which has a wide spectrum of fungistatic action and does not give a side effect on the synthesis of steroids and metabolism. The effectiveness of a single high-dose oral dose gives an advantage over other antimycotics.

In mild cases, topical medications (miconazole, clotrimazole) are indicated in the form of cream, vaginal suppositories and tablets. In case of chronic infection, systemic antifungal medications are repeated in certain courses. It is preferable to prescribe low-toxic forms of antimycotics to pregnant women (natamycin, nifuratel intravaginally) and in children (nifuratel in applications and intravaginally, fluconazole orally).

Treatment of vaginal candidiasis can be supplemented with local application of disinfectants and anti-inflammatory agents-borax solutions in glycerin, potassium permanganate and silver nitrate in the form of baths and douches. In vaginal candidiasis of polymicrobial origin, combinations of antimycotics with metronidazole are prescribed. Immunity is corrected with immunostimulating agents, and multivitamins are indicated. The cure rate for vaginal candidiasis is determined by the disappearance of clinical signs and a negative result of microbiological research.

Literature:

1. Qizi, B. O. S., Qizi, X. D. A., & Yusupovich, M. I. (2022). IJTIMOY SIYOSAT: ROSSIYADA INKLYUZIV TA? LIM HAQIDA. *FAN, TA'LIM VA AMALIYOTNING INTEGRASIYASI*, 922-930.
2. Yusup o'g'li, M. I. (2022). Mustaqil ta'limni blended learning texnologiyasi asosida tashkil etish. *FAN, TA'LIM VA AMALIYOTNING INTEGRASIYASI*, 126-131.
3. Yusup o'g'li, M. I. (2024). OLIY TA'LIM MUASSALARIDA INKLYUZIV TA'LIMNI RIVOJLANTIRISH: MUAMMO VA YECHIMLAR. *FAN, TA'LIM VA AMALIYOTNING INTEGRASIYASI*, 5(1), 1-10.

4. Usmanovna, N. G., & Oybekovna, D. G. (2018). The importance of motivation in education. *Достижения науки и образования*, (16 (38)), 33-35.
5. Jumaboyeva, J. S., & Daminova, G. O. (2019). ROLE OF TEACHERS' MOTIVATION IN TEACHING. *Вопросы науки и образования*, (3), 84-88.
6. Oybekovna, D. G., & Ahmadjonovna, M. M. (2019). Different roles of teachers. *Проблемы педагогики*, (1 (40)), 19-20.
7. Gulbahor, D., Nazirovna, I. D., & Hoshimovna, B. M. (2020). INCREASING LANGUAGE SKILLS IN MEDICAL INSTITUTIONS. *Journal of Complementary Medicine Research*, 11(1), 134-134.
8. Ахмедова, М., Расулова, Н., & Абдуллаев, Х. (2016). Изучение парциальных функций почек у детей раннего возраста с нефропатией обменного генеза. *Журнал проблемы биологии и медицины*, (2 (87)), 37-40.
9. Расулова, Н. А. (2009). Клиническая значимость факторов риска развития рахита у детей. *Врач-аспирант*, 34(7), 567-571.