ISSN 3060-4567

BACTERIAL VAGINOSIS IS A DANGEROUS DISEASE

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Bacterial vaginosis (BV) is a disorder of the vaginal microflora that occurs when the normal microbiota is replaced by high concentrations of anaerobic bacteria. Statistics from various authors show that 40–50% of all cases of the appearance or change of vaginal discharge are caused by bacterial vaginosis and approximately 25 to 50% of women today suffer from this disease [1–5].

The incidence of this disorder often depends on the population of women examined. It is 17–19% in family planning clinics and among female students observed in student clinics; 24–37% – among women undergoing treatment in sexually transmitted disease clinics; 20–25% – among pregnant women [6, 7]. The presence of this disease is observed in 30–50% of African American women, and in 10–20% of white women [8, 9].

Given the frequency of BV relapses, treatment and prevention of disease relapses are currently an important problem in pharmacotherapy. The ineffectiveness of antimicrobial drugs occurs due to the lack of a complete understanding of the pathogenesis of BV, as well as the causes of its relapses, which affects the effectiveness of treatment

This review examines the latest data on the pathogenesis of BV, treatment methods, and possible strategies to reduce disease relapses. Currently, new strategies to improve the effectiveness of disease treatment include changes in drug dose, treatment duration, long-term prophylactic regimens, and the use of biofilm disrupting agents. the use of high-dose suppositories containing metronidazole in combination with an antifungal agent, usually miconazole, which is also useful for mixed bacterial-fungal infections of the vagina. It is likely that future therapy will involve the simultaneous use of several components, including combinations of antibiotics, antibiofilm agents and probiotics.

ISSN 3060-4567

Key words: bacterial vaginosis, vaginal microflora, treatment, metronidazole, clindomycin, suppositories.

The prevalence of BV varies by country and population, but a recent systematic review and meta-analysis estimated the global prevalence of BV among women of reproductive age to be 23–29%.

BV increases the risk of contracting HIV, as well as the acquisition and onward transmission of other STIs and, if untreated, can lead to adverse consequences in pregnancy

The main similarity between AB and BV is that in both conditions there is a significant decrease in the amount lactobacilli, leading to a decrease in the concentration of lactic acid and, accordingly, an increase in the pH of the vaginal environment, and their replacement by conditionally pathogenic microorganisms. The differences between these diseases are significant. BV is characterized by the absence of inflammation and the presence of a large amount of anaerobic microflora. Usually involved in the development of BV

Gardnerella vaginalis, Atopobium vaginae, Prevotella spp., Porphyromonas spp., Bacteroides spp., Peptostreptococcus spp., Mobiluncus spp., Megasphaera spp., Leptotrichia spp., Dialister spp., bacteria associated with bacterial vaginosis (bacterial vaginosis associated bacteria) BVAB1, BVAB2, BVAB3, belonging to the order Clostridiales. AB in its typical presentation is characterized by an increased inflammatory response and/or severe signs of atrophy of the vaginal epithelium and the presence of a moderate amount of commensal intestinal microflora

Most often, Streptococcus spp is detected in AV. (up to 59% of cases), Staphylocuccus aureus (up to 42%), coagulase-negative staphylococci (up to 37%), Escherichia coli (up to 23%) [1]. BV is the most common disorder of the vaginal microecosystem in women of reproductive age. The prevalence of the disease varies extremely widely (7–68%) depending on region, ethnicity/race, and population studied [2].

Thus, among women with vaginal discharge, the incidence of BV is 20–30%, and among patients at high risk of sexually transmitted infections (STIs), it reaches 50–60% [3]. The main clinical manifestation of BV is specific discharge formed as a result of fermentation of normal vaginal mucin gel. Amines give the secretions a specific ("fishy") odor.

At an alkaline pH, the non-volatile salts of these compounds are converted into volatile amines, and the "fishy" odor becomes noticeable or intensifies. Signs of vulvovaginitis are not typical for BV (unless it is accompanied by trichomoniasis or candidiasis). Many women with BV have no symptoms. Research in recent years shows that BV not only reduces a woman's quality of life,_but is also associated with a number of inflammatory diseases of the genitourinary tract, and is one of the common causes of pregnancy complications [4–7]. The disease often takes a relapsing form: 60% of women experience relapses of BV within 12 months after treatment [8]. The prevalence of AV among women of reproductive age, according to different authors, varies from 5 to 24% [1, 9, 10]. In a study by M. Jahic et al. (2013) AB frequency in women with signs of vaginitis was 51% [11]. In women with a normal pregnancy, AV was detected in 3–10% of cases [12–14]. The clinical picture of AB is similar to the clinical picture of trichomoniasis: profuse yellow or greenish-yellow discharge, burning and itching in the vagina and in the area of the vaginal vestibule, dyspareunia. During a gynecological examination, swelling, hyperemia, petechial rashes are noted,_superficial erosions of the mucous membrane of the cervix, walls and vestibule of the vagina. As with trichomoniasis, the pH of vaginal discharge is elevated, but unlike trichomoniasis, in which the amine test is often positive, the amine test for AB gives a negative result. Symptoms may be present for a long time (months and sometimes years), with varying degrees of severity. Not uncommon cases when patients receive several courses of therapy for AV without visible results. Many women have microscopic signs of AV in the absence of symptoms, but the frequency of such asymptomatic forms of AV is unknown. The severe form of AV is very similar to desquamative inflammatory vaginitis, a

ISSN 3060-4567

clinical syndrome characterized by diffuse exudative inflammation, desquamation of parabasal epithelial cells, abundant purulent discharge, increased pH value of the vaginal environment [15–17]. In 1994 J.D. Sobel retrospectively described 51 cases of this disease [17].

The results of the studies allow us to distinguish two variants of the clinical course of BV: asymptomatic and with clinical symptoms. It should be noted that the majority of women (50–75%) who are diagnosed with bacterial vaginosis have no symptoms of this condition at all. In this case, we talk about the so-called asymptomatic form of bacterial vaginosis. With an asymptomatic course, there are no clinical manifestations of the disease along with positive laboratory signs. Other patients with BV, as a rule, complain of copious white or gray discharge from the genital tract, often with a “fishy” o especially after unprotected intercourse or during menstruation. Seminal fluid has a pH of 7.0, so after ejaculation, the vaginal pH increases, as a result of which amines become free and cause an unpleasant odor. Thus, an increase in unpleasant odor after sexual intercourse serves as a definite differential diagnostic sign of BV.

The duration of these symptoms can be years. As the process progresses, the discharge acquires a yellowish-greenish color, becomes thicker, foamy, slightly viscous and sticky, and is evenly distributed over the walls of the vagina. The amount of leucorrhoea varies from moderate to very profuse. BV itself does not pose a threat to health, but prolonged and abundant

- vaginal discharge is accompanied by a significant decrease in a woman’s quality of life (sexual function is impaired, performance decreases, etc.).
- According to the recommendations of the Center for Disease Control (CDC), the treatment regimen for BV includes:
- • metronidazole orally 500 mg 2 times a day for 7 days;
- • clindamycin cream 2% – 1 full applicator (5 g) intravaginally at night for 7 days;
- • metronidazole gel 0.75% – 1 applicator (5 g) intravaginally at night for 5 days.

- The following are considered alternative treatment regimens:
- • metronidazole orally 2 g once;
- • clindamycin orally 300 mg 2 times a day for 7 days;
- • clindamycin 100 mg intravaginally at night for 3 days.
- According to the recommendations of the World Health Organization (WHO), the standard treatment for bacterial vaginosis is taking metronidazole 400 or 500 mg twice a day for 7 days or 2 g once. The European Association for STIs (IUSTI/WHO) also recommends metronidazole 400 or 500 mg twice a day for 7 days or 2 g once or clindamycin vaginal cream 2% 5 g at night for 7 days. According to 2010 Federal Guidance.
- (Formular system), for BV it is recommended:
- • clindamycin 2% 5 g 1 r/day (at night) intravenously (using a standard applicator) for 3 days;
- • metronidazole po 0.5 g every 12 hours for 7 days;
- • metronidazole IV 1 tablet. (0.5 g) at night, course 10 days;
- • metronidazole gel 0.75% (5.0 g) at night, course 5 days.
- A randomized clinical trial using placebo control examined daily vaginal metronidazole for 16 weeks [22]. As a result, 70% of women in the treatment group showed no symptoms of BV, compared with 30% in the placebo group. After treatment ended, relapses occurred in 65% of women in the treatment group at 12 months and in 80% of women in the placebo group. In addition, in patients
- Those who used vaginal cream metronidazole were more likely to have vulvovaginal candidiasis ($p = 0.02$).
- Taking into account the above, it seems relevant to use combination drugs for the treatment of BV, containing, in addition to the antibacterial, also an antimycotic component. One such combination drug is Neo-Penotran, containing 500 mg of metronidazole and 100 mg

• miconazole nitrate in a convenient form in the form of vaginal pessaries, which have virtually no local irritating effect on the vaginal mucosa, ensuring

rapid solubility and good acceptability for patients, which distinguishes them favorably from the dosage form - vaginal tablets. Thanks to the combined antibacterial, antiprotozoal and antimycotic action, the presented combination has high clinical effectiveness. According to various authors [2], the cure rate for BV with the use of Neo-Penotran reaches 96–98%. The drug is prescribed 1 vaginal suppository 2 times a day for 7 days.

Summary. Bacterial vaginosis is now very common and cases of relapse of the disease are observed. This is due to the fact that patients do not complete the full course of treatment together. with a sexual partner, as well as with reduced immunity or frequent regime changes. sexual partners. Therefore, I believe that the main task required of gynecologists is to give the patient a complete understanding of the treatment procedure and disease prevention. Every attentive woman should undergo medical examinations on time and lead a healthy lifestyle.

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