

Correction of Vaginal Microbiocenosis in the Early Stages of Pregnancy

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Summary

Studies in recent years show that bacterial vaginosis is a disease that can cause serious reproductive health problems and complications of pregnancy. The question of the choice of the drug, especially in the first trimester of pregnancy, when the use of antibacterial therapy is limited, remains an urgent problem.

An alternative and optimal option for the treatment of bacterial vaginosis in pregnant women in the first trimester of pregnancy is a seven-day course of treatment with local use of ascorbic acid, which by the end of treatment in 88.9% of pregnant women forms vaginal normocenosis.

Key words: *bacterial vaginosis, vaginal microbiocenosis, ascorbic acid.*

Bacterial vaginosis is a pathology of the vaginal ecosystem caused by an imbalance manifested by a decrease in the number of fermenting lactobacilli with a simultaneous increase in the number of opportunistic microorganisms. Bacterial vaginosis is associated with a number of pregnancy complications, including early and late miscarriages, premature birth, premature rupture of membranes,

amnionitis, chorioamnionitis, postpartum endometritis [3, 5].

Of course, timely detection of bacterial vaginosis and vaginal sanitation can prevent complicated pregnancy [1, 2, 4]. At the same time, the question of choosing a drug, especially in the first trimester of pregnancy, is still relevant. Most treatment regimens for bacterial vaginosis contain metronidazole, the absence of fetotoxic effect of which in the early stages of pregnancy is not proven. The literature available to us contains limited data on the treatment of bacterial vaginosis in the first trimester of pregnancy, due to insufficient information about the absence of teratogenic action of etiotropic drugs on the embryo.

Thus, the search for methods of prevention and treatment of bacterial vaginosis, in women in the first trimester of pregnancy, when the use of antibacterial therapy is limited, remains relevant.

Purpose of research: to evaluate the effectiveness of topical use of ascorbic acid for the treatment of bacterial vaginosis in women in the early stages of gestation.

Material and methods of research. We observed 18 women with

a gestation period of up to 12 by 18 weeks. The main reasons for visiting a doctor were the presence of pathological secretions from the genital tract, itching and burning in the vagina and perineum.

All women underwent bacterioscopic examination of smears from the cervical canal and vagina, PCR-diagnosis of major sexually transmitted diseases (gonorrhea, chlamydia, trichomoniasis, herpes infection). For the diagnosis of bacterial vaginosis was used to determine the pH content of the vagina and the "amine test". Microscopic examination of gram-stained vaginal smears were determined leukocyte reaction, the total number of microbial cells and their morphology, the presence of "key cells" – epithelial cells with adhered to them grammaticality bacteria. The qualitative assessment of microflora was carried out by morphotypes and tinctorial properties. The microflora was quantified by calculating the average number of cells of different morphotypes in 3 fields of view of the microscope.

The results of the study were subjected to statistical processing using statistical software packages Statistica for Windows with the calculation of the arithmetic mean and its standard error ($M \pm m$). Differences between the compared groups were considered significant at $p \leq 0.05$.

The results and discussion.

Characteristic features of bacterial vaginosis-a positive amine test was observed in all women, the pH of the

vaginal environment in the range of 4.5-6 – 66.7% and $\text{pH} \leq 6$ – 33.3% of women.

Microscopic examination of vaginal smears stained with gram revealed the following pattern: leukocytes single (55.5%) and less than 10 in the field of view (44.5%), epithelial cells in large (77.7%) quantity, "key cells" (94.4%), microorganisms in large (102-103 in p/HR) (61.1%) and massive (>103 in p/HR) (38.9%) quantities.

The number of lactobacilli in smears was insignificant, while gram-negative sticks dominated in 72.2%, representatives of coccal microflora in 33.3% of smears. Yeast-like fungi of the genus *Candida* were found in 27.8% of smears in the form of budding forms-the intermediate phase of vegetation.

The ascorbic acid preparation was used intravaginally 1 tablet once a day for 7 days. An important advantage of the drug is the possibility of its use at any stage of pregnancy and lactation, unlike drugs with anti-anaerobic activity, the use of which is allowed only from the II trimester of pregnancy. 27,8% of women who are diagnosed with fungi of the genus *Candida* by microscopy of smears was additionally administered topically one of the antimycotic drugs. Repeated studies were carried out a month after treatment.

After treatment of bacterial vaginosis in women revealed leveling criteria R. Amsel: negative amine test, vaginal pH below 4.5, the lack of "key "

cells in smears. The total number of microorganisms decreased to 102 in p/HR in 83.3% of smears ($P < 0.001$) due to the elimination of gram-negative sticks, cocci and fungi. Lactobacilli dominated in 88.9% of smears.

Conclusions: an Alternative and optimal treatment option for bacterial vaginosis in pregnant women in the first trimester of pregnancy is a seven-day course of topical ascorbic acid, which by the end of treatment in 88.9% of pregnant women forms vaginal normocenosis. Ascorbic acid preparations for topical use are well tolerated, can be used for a long time in the treatment and prevention of bacterial vaginosis.

Literature:

- [1]. Ворошилина Е.С., Тумбинская Л.В., Донников А.Е., Плотко Е.Э., Хаютин Л.В. Биоценоз влагалища с точки зрения количественной ПЦР: изменения и коррекция во время беременности // Инфекции в гинекологии. – 2010. – Т. 68. №3. – С. 108–111.
- [2]. Мелкумян А.Р., Припутневич Т.В., Анкирская А.С. и др. Видовой состав лактобактерий при различном состоянии микробиоты влагалища у беременных // Клини. микробиология и антимикробная химиотерапия. – 2013. – №15(1). – С. 72-79.
- [3]. Сафронова М.М., Гренкова Ю.М. Нарушение влагалищного микробиоценоза: современные методы коррекции // Клиническая дерматология и венерология. – 2009. № 6. – С. 102–106.
- [4]. Усова М.А. Клинико-диагностические аспекты дисбиоза влагалища и терапия бактериального вагиноза у женщин в ранние сроки беременности: автореф. дисс. ... канд. мед. наук. Самара, 2010. 24 с.
- [5]. Roberts C.L., Morris J.M., Rickard K.R. et al. Protocol for a randomised controlled trial of treatment of asymptomatic candidiasis for the prevention of preterm birth. // BMC pregnancy and childbirth. – 2011. – Vol. 11. – P. 19.