

FEATURES OF VAGINAL MICROBIOCENOSIS IN WOMEN WITH PRETERM LABOR

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Background. Excessive accumulation of potentially pathogenic microflora in the vagina of pregnant women promotes the spread of ascending infections, which can lead to preterm labor. **Aim.** To study the characteristics of the vaginal microbiota in women with preterm labor.

Methods. Bacteriological examination was conducted on 60 women with preterm labor (Group I) and 26 healthy pregnant women (Group II). Cultures of vaginal discharge were performed using the sectoral streaking method on solid nutrient media. The identification of isolated strains was carried out using the Vitek 2 Compact bacteriological analyzer.

Results. The analysis of the vaginal microbiota in women with preterm labor showed an increased frequency of *Staphylococcus epidermidis* (26.7%), *Staphylococcus epidermidis* (hem+) (16.7%), *Streptococcus agalactiae* (13.3%), and certain species of *Enterobacteriales*: *Escherichia coli* (18.3%), *Escherichia coli* (hem+) (13.3%), *Klebsiella oxytoca* (6.7%). The quantitative levels of these microorganisms (lg 4.0 CFU/ml – lg 5.4 CFU/ml) exceeded the diagnostic threshold. An increase in the frequency of *Candida* spp. isolation (26.7%) was also found in women from Group I, as well as their quantitative level (lg 4.6 CFU/ml). Women in Group I had a higher frequency of 2-3 component bacterial-fungal associations (Group I – 61.7%, Group II – 13.3%). The study also revealed increased colonization of the vagina by obligate anaerobic microflora: *Atopobium* spp. (43.3%) and *Gardnerella vaginalis* (26.7%) at high concentrations. A decrease in the colonization level of the vagina by protective microflora (*Lactobacillus* spp.) was observed in 71.7% of women in Group I (lg 3.0 CFU/ml), while these microorganisms were absent in other examined women.

Conclusions. Women with preterm labor showed increased colonization of the vagina by obligate anaerobic and facultative anaerobic conditionally pathogenic microflora, which in most cases were found in 2-3 component associations, against the background of a decrease in the colonization of the vagina by protective vaginal microflora (*Lactobacillus* spp.).

Keywords: *microbiota, vagina, preterm labor.*