Objective. Miscarriage among the most pressing problems of perinatal medicine. 15 to 23% of diagnosed pregnancies interrupted prematurely, at the same time as one of the factors of miscarriage is considered a violation of the vaginal biocenosis.

The aim of our investigation was study of vaginal biocenosis by quantitative PCR in real time in the first trimester of pregnancy in women with recurrent miscarriage.

Materials and methods. Under observation were 100 women with recurrent miscarriage and a history of repeated 20 pregnant women with uncomplicated outcome of the gestation process. There were clinical, laboratory, general somatic those gynaecological examination, ultrasonography. Research carried out by vaginal biocenosis quantitative polymerase chain reaction detection of the results in real time.

Results are discussion. Age of pregnant women was between 16 and 35 years. The pregnancy was desired in all patients, but in 22 % - unintended. In history, 40 % of patients had spontaneous abortions, 21% - premature birth, 29% - missed abortion. Gestational age ranged from 8 to 11 weeks of gestation (average - 8, 9 ± 1, 2 weeks) and corresponded to the first critical period of pregnancy. All patients manifested absolute ultrasound markers of threatened abortion.

Vagina normocenosis was diagnosed only in 36 % of pregnant women with previous pregnancy loss. In 24 % of pregnant women found moderate dysbiosis, expressed mixed dysbiosis with detection of Candida - 30%, expressed anaerobic dysbiosis - 10 %. In 90 % of women with uncomplicated pregnancies occurred vagina normocenosis.

Conclusion. Breaking vaginal biocenosis in the first trimester of gestation in women with previous pregnancy loss creates the conditions for rising infection of fetal egg, amniotic membrane membranes in the second trimester and development of preterm birth and requires treatment to prevent them.