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Clinical effectiveness of live preparation of lactobacillus in treatment of bacterial vaginosis in pregnancy: A meta-analysis

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Objective: To evaluate the clinical effectiveness of live preparation of lactobacillus in treatment of bacterial vaginosis in pregnancy.

Methods: Randomized controlled trials of live preparation of lactobacillus in the treatment of bacterial vaginosis in pregnancy were collect by searching PubMed, Web of Science, OVID, CNKI, WanFang, VIP, CBM and Elsevier databases. Quality of the included trials were evaluated by two researchers independently, and data were extracted according to Cochrane systematic evaluation. RevMan 5.3 software was used for meta-analysis.

Results: Twenty-one randomized controlled trials involving 2 930 patients were included, which showed that there was significant difference in the clinical effectiveness between vaginal medication of live preparation of lactobacillus and vaginal medication of metronidazole [total effective rate (RR=1.05, 95% CI: 1.02-1.07, P=0.000 4]; significant differences were found in premature delivery rate (RR=0.49, 95% CI: 0.32-0.73, P=0.000 4), premature rupture of membrane rate (RR=0.54, 95% CI: 0.38-0.77, P=0.000 7), infant of low-birth weight rate (RR=0.45, 95% CI: 0.22-0.94, P=0.03), puerperal infection rate (RR=0.60, 95% CI: 0.39-0.94, P=0.03) between the two groups.

Conclusions: Vaginal medication of live preparation of lactobacillus was more clinically effective than vaginal medication of metronidazole for bacterial vaginosis in pregnancy. Live preparation of lactobacillus is associated with a lower premature delivery rate, a lower premature rupture of membrane rate, a lower low-birth weight rate and a lower puerperal infection rate.

Keywords: Enterocytozoon bieneusi; Genotype; ITS region; Macaca; Zoonotic

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