

A META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS IN THE TREATMENT OF BACTERIAL VAGINOSIS

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ABSTRACT

Introduction: Metronidazole is commonly used to treat bacterial vaginosis (BV) despite its various side effects and frequent cases of BV recurrences. This study aimed to compare the effectiveness of probiotic vs metronidazole for bacterial vaginosis.

Methods: A meta-analysis of randomized control trials (RCTs) was performed on the studies available in PubMed, Science Direct, Web of Science, Springer Link and the Cochrane databases. The meta-analysis was based on random-effects models and included studies evaluating BV therapy in women during their reproductive age. The data were analyzed using Rev Man 5 software for the heterogeneity.

Results: Thirteen studies involving 2149 subjects were included in the analysis. The results of this meta-analysis showed that probiotic has a beneficial effect for the treatment of BV compared to placebo (OR: 0.62; 95%CI= 0.40 – 0.97). In addition, probiotic can reduce the risk of BV incidence by a half time compared to metronidazole (RR: 0.51; 95% CI= 0.20 – 1.33),

Conclusion: Probiotic therapy could be used as an alternative to metronidazole therapy for bacterial vaginosis.

Keywords: meta-analysis, bacterial vaginosis, randomized controlled trial

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