

Comparative Outcomes in Bacterial Vaginosis Treatment: Resistance Insights from a Case- Control Study

Dalya M. Abdulrahman*, Hiba N. Saeed**, Shaymaa H. Younus**, Dhukaa A. AL- Jawadi***

ABSTRACT

Bacterial Vaginosis (BV) stills one of the more prevalent vaginal infections, which characterize by a dysbiosis of the vaginal microbacteria. Despite the availability of effective antimicrobial treatments, therapeutic resistance and recurrence are significant challenges, affecting patient outcomes and increasing healthcare burdens. This study provides a comparative analysis of treatment outcomes in patients with BV, concentrating on resistance mechanisms, recurrent infection rates, and potential contributing factors. A systemic evaluation of metronidazole, clindamycin, and other therapeutic options was conducted on 126 ladies with BV and assess the efficacy, microbial resistant patterns, and clinical recurrence. The study found no significant correlation between patient age and BV resistance ($P=0.86$). However, non- hormonal contraception use showed a significant correlation ($P=0.02$). Probiotics use, vaginal wash and smoking were all significantly associated with BV resistant ($P=0.047$). This study identifies gaps in current therapeutics regimens, emphasizing the need for personalized approaches and additional treatments targeting microbial biofilms and enhancing healthy vaginal microbiota restoration. Incorporating molecular diagnostic tools and innovative therapies could improve outcomes and mitigate treatment resistance.

Keywords: Bacterial Vaginosis, Treatment Resistance, Recurrence, Biofilm, Microbiota, Metronidazole, Clindamycin.

Bahrain Med Bull 2025; 47 (3): 2409-2412

* Head of Obstetrics and Gynecology Department,
Ninevah University, College of Medicine,
Nineveh Iraq. E-mail: dalya.abdulrahman@uoninevah.edu.iq

** Lecturer in Obstetrics and Gynecology Department,
Ninevah University, College of Medicine. Nineveh Iraq.

*** Assistant Professor in Obstetrics and Gynecology Department,
Ninevah University, College of Medicine. Nineveh Iraq