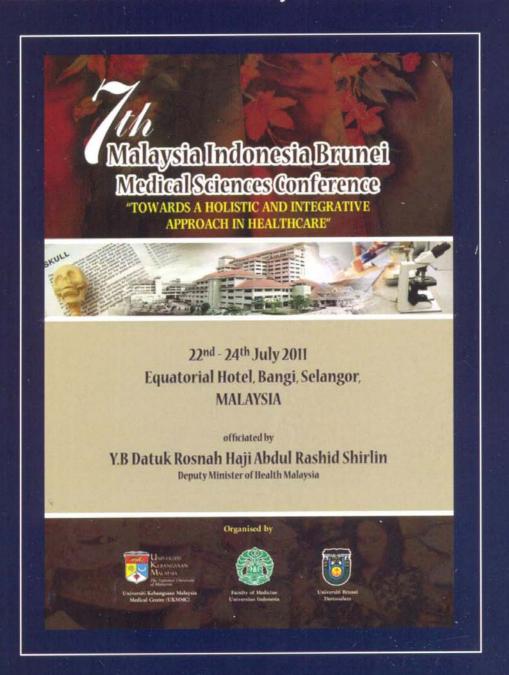


# MEDICINE Health

The Official Journal of The Faculty of Medicine UKM



F1G5 Nirmala CK

# EVALUATION OF BV®BLUE TEST KIT FOR THE DIAGNOSIS OF BACTERIAL VAGINOSIS

Nirmala CK<sup>1</sup>, Seri SS<sup>1</sup>, Suhaini IN<sup>2</sup>, Marlyn M<sup>2</sup>, Zulkifli SSZ<sup>1</sup>, Muhammad AJ<sup>1</sup>

Department of <sup>1</sup>Obstetrics and Gynaecology and <sup>2</sup>Microbiology, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

## Background:

The aim of this study is to determine the sensitivity, specificity and the predictive value of the BV<sup>®</sup> Blue Test Kit in the diagnosis of bacterial vaginosis and to observe the risk factors associated with bacterial vaginosis (BV) in the study population.

### Materials & Methods:

A prospective, cross-sectional study on 151 non-pregnant women who presented or referred to UKM Medical Centre with presence of vaginal discharge, abnormal vaginal odour, pruritus vulvae of lower genital tract or incidental finding of abnormal PV discharge on pelvic examination. Samples of vaginal discharge was tested for bacterial vaginosis infection using Amsel's criteria, BV® Blue test and Gram stain (Nugent's score). Gram stain interpretation was made blinded without knowledge of other test result. Using Gram stain's criteria as a gold standard, the sensitivity, specificity, positive and negative predictive value of BV® Blue test and each of Amsel's criteria were estimated.

### Results:

The use of vaginal douches increased the risk of BV. The risk of BV with vaginal douching was 2.8 (95% CI 1.0-7.8) compared to never users.  $BV^{\oplus}$  Blue test showed a sensitivity of 100.0%, specificity of 98.3%, positive predictive value (PPV) of 94.4% and negative predictive value (NPV) of 100.0% compared to Gram stain (Nugent's method).  $BV^{\oplus}$  Blue test had excellent agreement with Gram stain which was 98.7%.

### Conclusion:

BV® Blue test is a simple, rapid and reliable test allowing immediate diagnosis and prompt treatment of BV in the absence of microscopy which would greatly benefit majority of women at the greatest risk of sequel of bacterial vaginosis.

### Key words:

bacterial vaginosis, miscarriages, preterm labour, lower genital tract infection, vaginal infection.