SEXUALLY TRANSMITTED INFECTIONS, HIV/AIDS

THE SUSCEPTIBILITY PATTERN OF GARDNERELLA VAGINALIS TO METRONIDAZOLE AND CLINDAMYCIN IN BACTERIAL VAGINOSIS

Iskandar Yuanita [(1)]

Sriwjaya University, Dermatology And Venereology, Palembang, Indonesia [(1)]

Introduction: Bacterial vaginosis (BV) is a polymicrobial syndrome due to an imbalance of normal vaginal flora bacteria. Gardnerella vaginalis (G. vaginalis) is thought to have a major role in BV infection. Currently, many regions have reported of G. vaginalis resistance to metronidazole and clindamycin. In Indonesia there is no report of G. vaginalis resistance to metronidazole and clindamycin. The susceptibility test is one of methods to determine the resistance problem.

Objective: To determine the susceptibility of G. vaginalis to metronidazole and clindamycin in BV.

Materials and methods: An observational analytic laboratory study with cross sectional design was conducted from January 1st to February 28th of 2018 Dr. Mohammad Hoesin General Hospital Palembang. Analyzed using x2 or Fisher's exact test.

Result: In this study, 39 isolates were tested for susceptibility using broth microdilution methods to metronidazole and clindamycin. The isolate, consecutively, were collected from 52 specimens samples of BV patients. This study showed resistancy of G. vaginalis to metronidazole were 33,3% and to clindamycin were 20,5%. Compatibility between researchers and observers assessing using Kappa. The analysis using x2 test was obtained (OR = 0, 516: p = 0.307).

Conclusison: There has been in vitro resistance of G. vaginalis to metronidazole and clindamycin although the percentage of resistance is not as high as previous studies. The significance of sensitivity test results in vitro would be better if tested by in vivo.

Keyword: susceptibility pattern, metronidazole, clindamycin, Gardnerella vaginalis