

Comparison of Two Laboratory Techniques for Detecting Mycoplasmas in Genital Specimens

Osama Mohammed Saed Abdul-Wahab, BSc, MSc, PhD*

Objective: To compare Mycoplasma 1st kit and a conventional culture system in the detection of genital mycoplasmas.

Design: Comparative Prospective study.

Setting: Department of Microbiology and Genito-Urinary-Medicine Clinic.

Method: Mycoplasma 1st kit and a conventional culture system were compared; One hundred specimens from males and females were allocated to each method. Swabs were inoculated in the broth medium for the conventional culture system and in the Mycoplasma 1st kit cupules. All inoculated broths were incubated aerobically at 37°C and cultures showing pH shift were sub cultured in agar plates and incubated anaerobically in a candle jar at 37°C up to 7 days. The agar plates were examined for the characteristic *ureaplasma* and *mycoplasma hominis* colonies.

Result: Detection of the genital mycoplasmas obtained from each method was very similar with high sensitivities. Seventeen out of 100 specimens screened for *mycoplasma hominis*, yielded positive results by the conventional culture method and were detected in 26 specimens by Mycoplasma 1st kit. Fifty-eight out of 100 patients' specimens, *ureaplasma urealyticum* were isolated by the culture method and detected in 55 specimens by Mycoplasma 1st kit. The commercial kit provides additional information on antimicrobial susceptibilities.

Conclusion: Both systems were easy to perform. While broth-agar culture could be less expensive per test for routine screening of specimens than the kit, the commercial kit provides additional information on antimicrobial susceptibilities.

Bahrain Med Bull 2010; 32(4):