

The survey of contmination with genital mycoplasma in women with bactrial vaginalis by PCR method

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Abstract

Background&Objective: Genital mycoplasmas can cause infection of the genitourinary tract. Thses organisms are associated with bacterial vaginosis, pelvic inflammatory disease, endometritis, cervicitis, Nongonococcal urethritis. Spontaneous abortion, premature birth, neonatal pneumonia and meningitis, and infertility. The aim of this study was to determine the ability of PCR method for diagnosis and identification of genital mycoplasma in culture negative samples taken from women suffering from bacterial vaginosis.

Materials&Methods: 174 genital samples were taken from women suffering from bacterial vaginosis during January until December 2005. Two genital swabs were taken from each patient. One of them was cultured on the mycoplasma specific media for isolation of mycoplasma. The other swab was immersed in PBS buffer and frozen until DNA extraction. To detect the presence of mycoplasma and ureaplasma in genital DNA Samples: a 520-bp fragment of the 16S rRNA was amplified. The specific primers used for this purpose were: MGSO, UGSO, MY- ins.

Results: From 174 samples, 71 samples (40.8%) were positive by culture for mycoplasma & ureaplasma. From 103 culture negative samples. According to PCR results, 14 samples (13.6%) were positive and 89 Samples (86.4%) were negative for mycoplasma and ureaplasma.

Conclusion: This study showed that PCR method is more sensitive than culture for detection genital mycoplasma, Therefore PCR is a rapid, sensitive and easy method to detect genital mycoplasmas in urogenital swabs.

Key Words:

Mycoplasma hominis- Mycoplasma genitalium- Ureaplasma urealyticum- bacterial vaginosis- PCR