Original Paper

Comparison of culture and PCR methods for diagnosis of vaginal infection due to Mycoplasma Hominis

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Abstract

Background and Objective: Mycoplasma Hominis is the smallest pathogenic bacteria, with no cell wall and free living organisms. It grows slowly and the conventional clinical microbiology techniques can not be applied due to difficulties in cultivation in particular slow growth incubation. This study was done to compare the culture and PCR methods for diagnosis of vaginal infection due to Mycoplasma Hominis.

Methods: This laboratory test evaluation study was done on 150 patients with bacterial vaginosis and 50 healthy people with no infection as control, whom refereed to Imam Khomeini and Imam Zaman Hospitals in Tehran. Samples were collected in PPLO culture for growth and PBS to perform PCR method.

Results: 35.3% and 76% of patients were positive using culture and PCR methods, respectively. Using PCR method 8% of control subjects was positive. There was no significant association between PCR method with abortion, place of residence and also level of educations. There was a significant association between the age ($P<0.05$), times of changing under wear cloths ($P<0.05$) and parity ($P<0.05$).

Conclusion: PCR method is a more reliable technique to detect the vaginal infection due to Mycoplasma Hominis compared to culturing.

Keywords: Mycoplasma Hominis, Vaginal infection, Culture, PCR

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