MELTING TEMPERATURE ASSAY FOR DETECTON OF *CHLAMYDIA TRACHOMATIS STRAINS* BY BROAD-RANGE ROTOR GENE REAL–TIME PCR ASSAY IN BRAZILIAN WOMEN

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Chlamydia trachomatis is considered to be one of the major causes of sexually transmitted diseases, being the major public health problem worldwide. *C. trachomatis* causes infection (vaginal) with several complications, because the majority of infected patients are asymptomatic; a significant proportion of them remain undiagnosed and can develop complications. *C. trachomatis* is transmitted through infected secretions and mucous membranes of urethra, cervix, rectum, conjunctivae and throat. Several authors have already reported real-time PCR assays for the detection of *C. trachomatis*. Most of methods are based on a fluorescent dye-labeled TaqMan probe-based system. In our study we describe a real time PCR method for routine qualitative diagnosis of *C. trachomatis* infection by using SYBR-Green as a fluorescence dye. We analyzed 30 endocervical specimens from women infected: 100 % were positive for *C. trachomatis*. One sample from an individual not infected by *C. trachomatis* was used as control. Melting temperature assay protocol was determined by using the dissociation software of Rotor Gene-3000. We demonstrated that our melting temperature protocol with SYBR-Green chemistry is highly sensitive and robust for the detection of *C. trachomatis* .