Detection of *Chlamydia trachomatis* in Women by Rotor Gene Real–Time PCR Using SYBR GREEN I

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Chlamydia trachomatis (C. trachomatis) is considered to be one of the major causes of sexually transmitted diseases, and as such, it is a major public health problem wordwide. The aim was purpose a methodology for the identification and diagnostic of *C. trachomatis* based in the technology of Real-Time PCR assay using SYBR Green I as a flourescence dye. A total of 98 samples (vaginal secretion) were obtained during examination in the Specialized Ambulatory of Women, Recife, Pernambuco State. In the population study, 14,3% (n=14) of the samples were positive for *C. trachomatis* using this thecnique. Those samples were confirmed by melting temperature assay. There was more than one peak of melting, but the specific melting temperature was 77±0,5 and it was confirmed with analyses of 1% agarose gel electrophoresis that showed one band of approximately 150 bp DNA indicating the presence of the bacteria and validation the results. The other side, the inespecific peak of melting was associated with dimer primers. This study found a prevalence of 14,3% women infected with *C. trachomatis.* The results showed that the present Real-Time PCR assay was of high specificity and sensitivity and may therefore offer a rapid and reliable means for screening of the *Chlamydiaceae* pathogens.

Key words: C. trachomatis; PCR; Genotyping.
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