

CHAPTER VI

CONCLUSION

The PCR for detection of *C. trachomatis* was set up by using primers specific to plasmid sequence. The amplified products were analysed by agarose gel electrophoresis and dot blot hybridization. When the amplified products were analysed by gel electrophoresis, the PCR had a sensitivity of 2×10^{-14} g of pCHL2. The sensitivity of the PCR was increased to 2×10^{-15} g of pCHL2 when the amplified products were analysed by dot blot hybridization. This sensitivity corresponds to the number of copies found in 243 elementary bodies. The efficiency of the PCR for detection of *C. trachomatis* from clinical specimens was evaluated and found that the sensitivity was 100% and specificity was 97.7 % when compared with cell culture technique. The two false-positive specimens were tested with Gen-Probe pace 2 and found that both of them were positive by this test and the corrected specificity of PCR was 100 %. For this experiment, no false positive due to amplicon carryover was found because it was prevented by using incorporation dUTP instead of dTTP and adding the UDG in reaction mixture prior to PCR. The false negative due to unknown inhibitors were tested and found that all specimens contain no inhibitors.