Diagnosis of Infectious Diseases Using Polymerase Chain Reaction Assay

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Abstract

Effective management of infectious diseases require proper diagnosis of any given condition. Rapid and easy detection of pathogenic organisms will facilitate early intervention in the control of infections. Traditional methods for identification of pathogens that cause disease in both animals and human include microscopy, microbiological culture and identification, immunological detection of antibodies or antigens. Microbiological culture and identification methods are time consuming, laborious, expensive and sometimes a risk to health workers. In some cases, pathogens are generally present in various samples in very low numbers making their detection difficult. Immunological methods on the other hand are limited due to cross reactions and low sensitivity and specificity. There is need to use rapid, specific and sensitive techniques that are cheap and safe.