DETECTION OF ANTIBODIES TO CANDIDA TROPICALIS INFECTION USING PRECIPITATION TECHNIQUES : A CAMPARISON OF IMMUNO DIFFUSION AND COUNTER IMMUNO ELECTROPHORESIS

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There are over 25 species of the genus Candida identified. Of these, the standard text books list only *Candida albicans* as being pathogenic for man. It is however, now evident that *C.tropicalis*, a distinct and less well recognised species is being incriminated increasingly in the causation of human disease.

In Sri Lanka, this fungus has been identified as a significant contributor to chronic lung disease. Routine tests for the serological diagnosis of their infections are however not available. These procedures facilitate rapid diagnosis as well as serve as a means of diagnosis when the organism is not easily accessible for culture.

This study is therefore directed towards the development of a suitable serological technique for the diagnosis of infections by *C.tropicalis*.

For this purpose antigens were prepared from a strain of *C.tropicalis* isolated from systemic disease. Hyperimmune serum was prepared to this fungus in rabbits. Two precipitation techniques, double-immunodiffusion in agar (DID) and counter-immunoelectrophoresis (CIE) were tried out. Optimal conditions for the satisfactory performance of these tests were worked out using antigens and antisera prepared in the laboratory under varying conditions. It was possible to determine methods for the detection of antibodies by both DID and CIE.

The CIE technique was superior to the DID in that it could detect antibodies of a lower titre, and could prove more beneficial in the detection of antibodies to *C.tropicalis* in human infections where low antibody titre are expected.

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