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THE APPLICATION OF FLUORESCENT-ANTIBODY TEST TO MICROFILARIAE OF BRUGIA PAHANGI

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The Fluorescent-antibody test has been applied to the diagnosis of Filarial infection in man by Lucasse (1962) and Chowdhury and Schiller (1962). The aim of our work is different in that we plan to study the antigenic relationship of different species of microfilariae of both man and animals, using the F.A. test. This kind of study is desirable particularly when dealing with the microfilariae of *B. pahangi* and *B. malayi* which are morphologically indistinguishable.

The source of microfilariae were cats infected with B. pahangi. The antisera were prepared by injecting a washed suspension of microfilariae obtained from cat's blood into rabbits. The injections were made subcutaneously with Freund's adjuvant each rabbit receiving approximately 15,000 microfilariae in divided doses. The globulin fraction of the antiserum was conjugated to fluorescein isothiocyanate according to the standard technique (Nairn, 1962). The slides for the test were prepared by making a thick smear of heavily infected cats blood on clean glass slides. This was allowed to dry at room temperature for two hours and then dehaemoglobinized by gently immersing it in a beaker containing 0.1% solution of Hydrochloric acid as described by Tobie and Coatney (1961) for

staining malaria parasites. The slides were then rinsed once in distilled water and once in Phosphate Buffered Saline (pH 7.2) and then allowed to dry overnight in a desiccator containing silica-gel at 5°C. Next day the smears were treated with conjugated antiserum which had been absorbed previously against rabbit liver powder. The reaction was allowed to take place in a moist chamber for half an hour. The controls consisted of slides prepared similarly but treated with conjugated normal serum. Although the controls always showed a certain amount of fluorescence the intensity of brightness was greater with the test slides. At present work is in progress to improve on this technique so as to make the results sufficiently clear for comparative study.

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