

A-02: Identification of antigens of *Setaria digitata* for the immunodiagnosis of bancroftian filariasis

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The non-availability of adult *Wuchereria bancrofti* antigens, and the reported findings that serum antibodies from *W. bancrofti* patients cross react with *Setaria digitata* antigens, led us to undertake the present study to isolate *S. digitata* antigens of potential value for the diagnosis of bancroftian filariasis.

Membrane and soluble extracts of adult worms of *S. digitata* and *W. bancrofti* microfilariae separated by SDS polyacrylamide gel electrophoresis were immuno-blotted with sera collected from, (a) asymptomatic, amicrofilaraemic, (b) asymptomatic microfilaraemic and (c) symptomatic patients positive for fluorescent antibody test (FAT).

The 130 KDa antigen of *S. digitata* was consistently recognised by serum antibodies from symptomatic patients positive for FAT and by serum antibodies from those who were microfilaraemic but were asymptomatic. However, this antigen was not recognized by serum antibodies from individuals who were asymptomatic and amicrofilaraemic (non-endemic normals). The 130 KDa antigen was not present in both soluble and membrane fractions of *W. bancrofti* microfilariae.

An antigen of molecular weight 130 KDa was also recognised from sera of *W. bancrofti* infected patients positive for FAT by polyethylene glycol precipitation. These preliminary studies suggest that this antigen of 130 KDa might prove to be a good candidate for the diagnosis of filarial infections.

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