

Cross-reaction of antigen preparations from adult and larval stages of the parasite *Setaria equina* with sera from infected humans with *Wuchereria bancrofti*

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Abstract

Crude antigenic preparations from *Setaria equina* were used in ELISA and Western blotting to examine cross-reaction with human sera from areas endemic for bancroftian filariasis. Sera from normal subjects from non-endemic areas were included as negative controls. Cross-reaction was found between *S. equina* antigens and antibodies in the sera of *Wuchereria bancrofti*-infected patients, with the highest levels observed between sera of chronic infected patients and *Setaria* spp. crude female worm surface antigen (CFWSA). In the absence of active transmission of *Setaria* spp. infection, CFWSA is useful to detect chronic *W. bancrofti* infection before patients become symptomatic, particularly when chronic patients are known to be amicrofilaraemic. In the presence of active *S. equina* infection, antigens from the adult and microfilaraemic stages showed the highest degree of cross-reaction with human sera.

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