A New Promising Antigen for Immuno-Diagnosis of Bancroftian Filariasis Using Elisa.

Atef A. Sakla, Abdallah A. Hassan, Ahmed K. Dyab Abeer El-Sayed Mahmoud

Abstract:

Setaria equina crude antigen was used for the first time in diagnosis of human bancroftian filariasis by using ELISA. The adult worms of Setaria equina were collected, washed, grounded in cold PBS, using homogenizer, and centrifuged. The supernatant was used as the adult antigen. Fractionation of the whole S. equina crude antigen was done by polyacrylamide gel electrophoresis. Three bands were obtained at 25.4 KD, 27.5 KD, and 29.9 KD. The prepared whole S. equina crude antigen was used in ELLSA test for diagnosis of humans bancroftian filariasis and S. equina infection in donkey as well. The sensitivity and specificity of the test in equines were 100% and 80% respectively, while in human bancroftian filariasis the sensitivity and specificity was 71% and 71.43% respectively. ELISA proved to be reliable and sensitive test and could be used in sero diagnosis of W. bancrofti and S. equina infection in both humans and equines as well. This test proved to overcome the problem arising from sampling the patients at the midnight, furthermore antigen prepared from S. equina adult worm was more economic than the imported other antigens prepared from D. immitis and others.

Keywords:

Setaria equina, antigen, diagnosis, bancroftian filariasis, ELISA.

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