DETECTION OF CIRCULATING ANTIGEN OF TOXOPLASMA GONDII IN MICE WITH RESPECT TO ITS SIGNIFICANCE FOR DIAGNOSIS OF HUMAN TOXOPLASMOSIS

Haßl A., and H. Aspöck
Institute of Hygiene
University of Vienna, AUSTRIA

The appearance of circulating antigen (cag) of Toxoplasma gondii in the sera of mammals is commonly considered as an indication of an acute infection. However, although antigenemia is detectable in sera of man with natural infections as well as in sera of mice with laboratory acquired infections, there seem to be striking biological differences between these antigens.

Mice were i.p. infected with pathogenic strains of Toxoplasma gondii (BK, RH, T, 928), blood samples were collected, daily until the death of the mice, and the sera were tested for their contents of cag. The cag was treated in a PAGE and an Immunoblot. The characteristics of this cag were compared with those of cag from human sera. Cags from different sources are obviously consisting of different proteins appearing in the blood at different times p.i. Thus, cag of experimentally infected mice cannot be used in replacement of human cag for immunization of antibody donors or as positive controls in immunotests for cag with human sera.