

**THE SIGNIFICANCE OF DETECTION OF CIRCULATING
ANTIGEN IN THE DIAGNOSIS OF TOXOPLASMA
INFECTIONS**

A. Hafl, H. Auer, and H. Aspöck

Dept. of Medical Parasitology
Institute of Hygiene
A-1095 Vienna . Austria

Circulating antigen of *Toxoplasma gondii* (*cag*) has proved to be a diagnostic marker for acute *Toxoplasma* infections, the detection of *cag* is therefore used as an important diagnostic tool for the uncovering of toxoplasmosis in patients with AIDS. Attempts were, however, also made to adapt this serological method for the detection of a primary infection with *Toxoplasma gondii* in pregnant women within the framework of the Austrian toxoplasmosis screening.

121 serum samples of 87 pregnant women with serologically confirmed acute infections and about 10 000 sera of women with different toxoplasmosis status were tested for *cag* in a four-layer enzyme-linked immunosorbent assay. In 7 sera (5.8%) of the group with acute infections and in 12 sera (0.12%) of the other group an antigenemia was detected. In all sera the antigenemia coincided with high titres of specific antibodies. Evaluation of all available serological results led to the conclusion that the infection of all women with an antigenemia had occurred 2 to 4 months before testing.

Thus, the detection of *cag* in a non-immunodeficient person indicates an advanced period of an acute infection; for the detection of the early phase of a *Toxoplasma* infection the combined application of different tests basing on antibody titration is, however, apparently sufficient.