Detection and characterization of circulating antigens in Toxoplasma infections.

Screening for Toxoplasma infections became obligatory in Austria in 1975 when the procedure was included in the "Mutter-Kind-Paß" of the Austrian Ministry of Health. The serodiagnosis of primary Toxoplasma infections is usually based on detection of specific IgM and IgG antibodies by means of the combined application of different serological methods. In addition, methods for detection of circulating antigens, which normally occur during the first weeks p. i., have been introduced recently as a further improvement to toxoplasmosis surveillance.

During the past months more than ten thousand sera - mainly of pregnant women - were tested in the ELISA for circulating Toxoplasma antigens. Ten sera proved to be positive. Circulating Toxoplasma antigens could be isolated and separated by means of affinity chromatography and SDS-PAGE respectively. Several protein fractions of different molecular weights (20,000 - 60,000 daltons) could be demonstrated. Further experiments are under investigation.