Coexisting zoonoses and their late consequences in clinical and immunoserological evaluation involving a selected group of patients

Wanda Kocięcka

Outpatient Unit of Zoonotic and Parasitic Diseases CENTERMED, Św. Marcin 58/64, 61-807 Poznań, Poland; e-mail: wanda_kociecka@wp.pl

Coexisting parasitic and bacterial zoonoses leading to multiform patterns of clinical pathology may result in diagnostic and therapeutic difficulties and a protracted type of the morbid process.

Toxoplasmosis and yersiniosis (Yersinia enterocolitica, Y. pseudotuberculosis) are zoonoses with distinct aetiologies. However, they frequently share common sources of infection and pathways of transmission to humans, mostly involving the alimentary pathway. They manifest a variable organ pathology and tend to induce distant sequels in untreated patients.

The aim of this study was to perform a clinical and immunoserological analysis of a group of patients diagnosed with chronic toxoplasmosis with an untypical course, who presented periodic abdominal and protracted complaints in the motor organs. Fifty-one patients were examined, including 34 women, two girls, 13 men and two boys. All were subjected to basic laboratory and immunoserological tests.

ELISA analysis confirmed the presence of toxoplasmosis with chronic lymphadenopathy at a late stage of invasion in 15 patients (29.21%); IgM class antibodies specific for *T. gondii* were detected in one case. Yersiniosis was examined by ELISA against IgA, IgM and IgG class antibodies specific for *Yersinia enterocolitica* and *Y. pseudotuberculosis* antigens. Of the 51 examined patients, elevated levels of IgA antibodies were detected in 20 (29.21%), IgM in seven patients (13.37%) manifesting intestinal disturbances, and IgG were found in 49 patients (96.4%) with chronic lesions in their motoric system. With regard to epidemiological anamnesis, testing for borreliosis confirmed the presence of IgG class antibodies specific for *Borrelia burgdorferi* s.l. antigen in 12 patients (23.27%) and IgM in two patients. All tests, verified Western Blot approach, confirmed a late stage of infection.

The multiorgan pattern demonstrated by clinical lesions resulting from coexisting zoonoses, toxoplasmosis, yersiniosis and borreliosis requires a thorough clinical and diagnostic analysis together with the monitoring of late sequels of the pathological processes. Chronic borreliosis intensifies the pathology in the articular system.