Clinical picture, diagnostics and condition of the immune system in patients with reactive arthritis against the background of Epstein-Barr virus infection

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Introduction & Aim: The problem of reactive arthritis (ReA) is related to its prevalence, diagnostic difficulties, involvement of many organs and systems in the pathological process, insufficiently effective treatment. Aim of this study is to study the clinical and immunological features of the course and diagnostics of ReA against the background of Epstein-Barr virus infection.

Materials & Methods: 24 patients with clinical manifestations of arthritis have been examined. General laboratory, immunological, serological and molecular genetic studies to determine EBV-infection has been conducted for the patients.

Results & Discussion: Clinically, all patients experienced arthralgic. In addition, six (25%) people have been diagnosed with long-lasting subfertility, 16 (66.67%) - chronic fatigue syndrome, seven (29.1%) - respiratory immunodeficiency. According to the results of research, five (20.8%) patients had positive rheumatoid factor, six (25.0%) - increased ESR, 10 (41.7%) - increased AS (L) O level, and five (20.8%) - increased concentrations of CRP. High titers of specific antibodies of class IgM, IgG to capsid and nuclear antigens EBV and EBV-DNA have been found in saliva, mucous membrane scraping and blood of the patients by the method of polymerase chain reaction. The immunogram analysis more often pointed to the presence of immunodeficiency by the combined lymphocytic-phagocytic type in 18 (75%) of the examined, among whom lymphocytosis was observed in seven (29.1%) patients. The increased number of natural killer cells was determined in nine (37.5%) patients, and in 13 (54.1%) - changes of CD8+-lymphocytes. 13 (40.6%) patients had increased levels of T-helper cells which can be interpreted as a prerequisite for the formation of auto aggression. Patients were treated with antiviral, immunotropic, symptomatic therapy, specific immunoglobulins.

Conclusions: ReA of EBV-origin was most often found in women (70.8%) aged 18-35, and was characterized by an increase rheumatoid factor (20.8%), CRP (20.8%), AS (L) O (41.7%), ESR (25%) against the background of the absence of autoantibodies specific for rheumatoid arthritis.

Biography

Marta Lomikovska completed her Medical Studies at Danylo Halytsky Lviv National Medical University and internship on Speciality Therapy at Lviv National Medical University and Lviv Regional Clinical Hospital. From 2003 to 2008, she worked at the Sokilnyky Medical Clinic as a Therapist. From 2011 till 2013, she is working in Clinical Immunology and Allergology Department at Lviv National Medical University. From 2014 and till now, she is also working as Assistant Professor in the same department. She is an author of 15 scientific publications in national and international journals.

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