Features of cytokines production as a pathogenetic basis of clinical forms of acute tick-borne borreliosis

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The study was devoted to the determination of cytokines (IL-1β, IL-4, IL-8, TNFα) during the stage of acute manifestation of tick borreliosis. The study included patients with erythema (113 people) and non-eritemic forms of the disease (242 persons). It is established that the level of IL-4 was raised in the midst of erythemic form of the disease, and the concentration of IL-8 — in non-eriticmic form. In the period of convalescence there was an increased IL-1β and TNFα production in erythemic form and increased IL-8 synthesis in non-eriticmic form of tick-borne borreliosis. An important criterion was the distinctive nature of the production of IL-8 in the course of tick-borne borreliosis: in the erythemic form of the disease the initial IL-8 level was high, while in the non-eriticmic form, on the contrary, it was elevated in the period of convalescence. (Cytokines and Inflammation. 2013. V. 12. № 3. P. 84–88.)

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