Interleukins 4, 6, 8 in the pathogenesis of rheumatoid arthritis and its complications

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Objective: The cytokine profile in rheumatoid arthritis (RA) is characterized by hyperproduction of pro-inflammatory (IL-6, IL-8 et al.) and anti-inflammatory (IL-4 et al.) cytokines, with prevalence of the first. In RA patients, increased IL-6 in blood serum positively correlates with inflammation activity, development of systemic manifestations, RF IgM titer, and severity of joint destruction, arterial hypertension and coronary heart disease (CHD). An increase in blood level of IL-8, characteristic for RA patients, associates with the existence of accompanying CHD. No significant difference in the level of IL-4 between the RA patients and controls has been shown. IL-4 possesses anti-atherogenous properties. Literature data on the influence of basic therapy and biological preparations on the levels of IL-4, IL-6 and IL-8 in RA are inconsistent. (Cytokines and Inflammation. 2014. Vol. 13. № 1. P. 5–10.)

Key words: cytokines, rheumatoid arthritis.