Role of cytokines in pathogenesis of chronic urticaria

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The review contains updated information on the role of cytokines in pathogenesis of chronic urticaria. Close attention was paid to the most complex forms of urticaria: cold urticaria, idiopathic, and autoimmune. It is shown that in neurogenic urticaria substance P involved in the processes of neuro-immune regulation specifically activates NF-κB transcription factor, which controls the production of pro-inflammatory cytokines IL-1, IL-6, IL-12 and TNFα by monocytes and macrophages. The features of the expression of several inflammatory cytokines (IL-6, TNFα, IL-3) in pathogenesis of cold autoimmune syndrome are shown. The authors suggest that, in addition to the Th1/Th2 balance, a special role of Th17 imbalance and regulatory cytokines IL-10 and IL-17 should be considered in the pathogenesis of autoimmune form of urticaria. (Cytokines and Inflammation. 2014. Vol. 13. № 1. P. 11–15.)

Key words: urticaria neurogenic, idiopathic autoimmune, cytokines.