The changes in cytokine production are considered an important pathogenetic mechanism of immune-dependent diseases, one of which is atopic dermatitis (AD). The cytokines may be considered as markers of prognosis and course of disease and potential therapeutic targets in the context of modern immunotherapy. The paper reviews cytokine regulation involved in local cell interaction in the foci of inflammation in the skin and changes in cytokine balance detectable in immune cell cultures and in blood serum at different stages of disease. A similar type of changes in the balance of pro- and anti-inflammatory cytokines at the local and systemic levels is discussed. (Cytokines and Inflammation. 2012. Vol. 11. № 1. P. 5–10.)

**Key words:** cytokines, atopic dermatitis, immune pathogenesis, immune regulation.