Abstract

Common variable immunodeficiency (CVID) is an immunological disorder characterized by defective antibody production, recurrent infections, most notably of the respiratory tract, autoimmune phenomena and cancer. Some CVID patients may also present disturbances of the cellular immune response such as a decrease in the number and proportion of different lymphocyte populations, diminished lymphoproliferative response to mitogens and antigens, altered production of cytokines, and deficient expression of cell-surface molecules. Most Brazilian CVID patients included in this study show a decrease in T and B lymphocyte counts in the peripheral blood. Furthermore, their lymphocytes are more susceptible to apoptosis following activation than normal individuals, and they have a decrease in the expression of activation molecules like CD25, CD69, CD40L and CD70. Moreover, they show a decreased synthesis of IL-4 and IL-5 in comparison with normal individuals. The increase in susceptibility to apoptosis following activation, may also be responsible for the decrease in the expression of activation molecules and CD40L, decrease in Th2 cytokines synthesis, and in the number of T and B circulating cells. In this study we discuss some of these immunological disturbances correlating them to the patients clinical features and comparing our patients findings to the literature.

Keywords

immunodeficiency, humans, antibody, cytokines, clinical features.