Reduced production of interferon-gamma but not interleukin-10 in bipolar mania and subsequent remission

呂思潔

Su KP;Leu SJ;Yang YY;Shen WW;Chou YM;.Tsai SYM.

摘要

Abstract

Background: Activation of inflammatory response system (IRS) is suggested by increased levels of plasma soluble interleukin-2 receptor (sIL-2R) in patients with bipolar mania. The reasons for changes in stimulated interferon-gamma (IFN- γ) and interleukin-10 (IL-10) production in bipolar mania along with subsequent remission remain unclear. Methods: We measured phytohemagglutinin (PHA)-stimulated IFN- γ and IL-10 production in 20 physically healthy inpatients aged between 18 and 45 years with bipolar mania (DSM-IV) using Young Mania Rating Scale (YMRS) scores ≥26 and in subsequent remission (YMRS≤12), as well as in 15 age- and sex-matched healthy normal controls. Results: The mean values of IFN- γ production in patients in acute mania and in subsequent remission were significantly lower than those of healthy controls (P=0.0004, P=0.0005, respectively). There was no significant difference in IL-10 production between bipolar patients in acute mania as well as in subsequent remission and healthy controls. In acute mania, the mean values of IFN- γ and IL-10 production in medicated patients (n=13) did not differ from those of drug-free patients (n=7). Other clinical variables had no effect on IFN- γ and IL-10 production. Limitation: The uncontrolled medication, small sample size of the bipolar individuals, and some immune re-measurements prior to full remission periods, limit generalization from the data in this study. Conclusion: Reduced production of IFN- γ without alternation of IL-10 in bipolar mania and subsequent remission suggest that the immune modulation may vary in patients with different major psychiatric disorders