Changes in lymphocyte subset after double-filtration

薛玉梅

Yeh JH;Chieh PJ;Hsueh YM;Shih CM;Chiu HC

摘要

Abstract

To investigate the direct impact of membrane plasmapheresis on the distribution of lymphocyte subsets, paired blood specimens from 18 healthy volunteers were studied before and immediately after a single session of double-filtration plasmapheresis (DFP). After a single session of DFP treatment, the number of helper T cells had increased by 2.34% (P = .0142), whereas the suppressor T cells decreased by 2.22% (P = .0095), with consequent increases in the T-helper/T-suppressor (Th/Ts) ratio (P < .0001). The number of B cells was also significantly increased (P = .0012) after DFP treatment; however, total T and natural killer cells did not differ after treatment. Older volunteers (>40 years) had significantly higher percentages of B (P = .0002) and helper T (P = .0432) cells after treatment. In contrast, younger subjects had a lower percentage of suppressor T cells (P = .0174). However, the Th/Ts ratio increased significantly irrespective of age group (P = .0016) and sex (P = .0016). A single session of membrane plasmapheresis seemed to activate the cellular immune system in our sample of 18 healthy volunteers, increasing the number of B cells and the Th/Ts ratio.