

T AND B LYMPHOCYTES EXPRESSION STATUS OF OPTIC NEURITIS IN CHINA

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Objective: To explore immunological pathogenesis of optic neuritis in China.

Methods: The expression of the T cell subsets (CD3+, CD4+Th, CD8+Ts) and B cells in peripheral blood mononuclear cells of patients with optic neuritis (ON) were examined by Flow Cytometer and then compared with those of patients with non-inflammatory nervous system disease (NINSD).

Results: Totally 116 cases of ON were included, including 81 female and 35 male patients, with a mean age of 39.2 ± 12.1 yrs. The control group had 50 cases of NINSD patients including 22 female and 28 male, with a mean age of 63.9 ± 15.3 yrs. The values of CD3+T($68.1\% \pm 9.9\%$) and CD4+Th($38.4\% \pm 10.0\%$) in ON group were significantly lower than those of NISD patients (CD3+= $73.0\% \pm 6.0\%$, CD4+Th= $49.2\% \pm 8.9\%$)($P=0.001$, $P=0.0004$), while the CD8+Ts($26.2\% \pm 8.2\%$) in ON group were statistically higher than those of NISD patients(CD8+Ts= $22.2\% \pm 6.8\%$)($P=0.003$). B cells in ON group($19.4\% \pm 8.7\%$) was statistically higher in ON group than in that of NINSD group($14.5\% \pm 5.0\%$) ($P=0.0002$).

Conclusion: Decreased CD3+T and CD4+T, together with a increased CD8+T, suggested that the cellular immunity was depressed, while the statistically elevated B Cell suggested a increased humoral immunity process in optic neuritis patients in China.