Effect of T lymphocyte and natural killer cell on patients with non-Hodgkin's lymphoma

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the effect of T lymphocyte and natural killer cell on patients with non-Hodgkin's lymphoma (NHL). Methods: A total of 120 cases with NHL in our hospital were selected as the object and 60 people undergoing health examination were used as control group. All NHL patients just received chemotherapy. Before and 1 month after chemotherapy, T lymphocyte and natural killer (NK) cell level were determined. Results: Before chemotherapy, CD3⁺, CD4⁺ cell ratio and CD4⁺ / CD8⁺ value of NHL group was significantly lower than that of control group, CD8⁺, CD25⁺, CD4⁺ CD25⁺ Treg and NK cell ratio was significantly higher than that of control group (P<0.05). After chemotherapy, CD4⁺ cell ratio and significantly increased and CD4⁺ CD25⁺ Treg ratio significantly decreased, also with significant difference compared with control group (P<0.05). For patients with different clinical phase and treatment outcome, T lymphocyte and natural killer cell were significantly different. With the increasing of clinical phase and bad curative effect, CD3⁺, CD4⁺ ratio and CD4⁺ / CD8⁺ value decreased, CD8⁺, CD25⁺, CD4⁺ CD25⁺ Treg and NK cell ratio increased. Conclusions: There is closely relationship between T lymphocyte and natural killer cell with NHL. Detection of the level of T lymphocyte and natural killer cell in NHL patients was hopeful for predicting illness development and curative effect.

[KEY WORDS] Non-Hodgkin's lymphoma; T lymphocyte; Natural killer cell; Curative effect