

论文 CD3+CD16+CD56+自然杀伤T淋巴细胞与移植肾免疫状态的关系

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摘要:

目的 探讨肾移植患者CD3+CD16+CD56+自然杀伤T细胞(NKT)在外周血中的表达与移植肾免疫状态的关系, 以及钙调磷酸酶抑制剂(CNI)不同的血药浓度下NKT细胞的水平。 **方法** 将92例肾移植患者根据CNI血药浓度水平及有无排斥反应分为3组: 正常血药浓度的无排斥组(A组, 58例)、低血药浓度的无排斥组(B组, 8例)、排斥组(C组, 26例), 10例正常人群作为对照组(D组), 采用流式细胞术检测各组外周血CD3+、CD3+CD4+、CD3+CD8+、CD3-CD16+CD56+自然杀伤(NK)和CD3+CD16+CD56+NKT细胞及人白细胞抗原(HLA)抗体的水平。 **结果** A、B、C、D组CD3+CD16+CD56+NKT细胞的百分数分别是(4.29±2.57)%、(4.31±2.08)%、(1.23±1.06)%、(3.98±2.26)%。A、B组与D组比较, NKT细胞百分数、NK细胞百分数及CD4+/CD8+无差异, HLA抗体阳性比率无显著升高; C组NKT细胞的百分数与正常对照组相比降低(P<0.05), NK细胞、CD4+/CD8+均显著高于D组(P<0.05), HLA抗体阳性比率显著升高。 **结论** 肾移植后排斥反应时NKT细胞低表达, 出现HLA抗体; 无排斥反应时NKT细胞表达正常, 不受低血药浓度的影响。

CD3+CD16+CD56+NKT细胞在抑制移植肾免疫激活中起着重要作用。

关键词: 自然杀伤T淋巴细胞; 肾移植; 排斥反应

Relation between CD3+CD16+CD56+ NKT cells and immune status in patients after renal transplantation

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Abstract:

Objective To explore the relation of expression of peripheral blood CD3+CD16+CD56+ natural killer T (NKT) cells with immune status and different concentrations of calcineurin inhibitor (CNI) in patients after renal transplantation. **Methods** 92 patients after renal transplantation were divided into three groups according to rejection and concentrations of CNI: patients without rejection in normal concentration(group A, 58 cases), patients without rejection in lower concentration (group B, 8 cases), and patients with rejection (group C, 26 cases). 10 healthy individuals were selected as the controls. CD3+, CD3+CD4+, CD3+CD8+, CD3-CD16+CD56+NK and CD3+CD16+CD56+ NKT cells and human leucocyte antigen(HLA) antibodies were analyzed by flow cytometry. **Results** Percentages of CD3+CD16+CD56+ NKT cells in groups A,B,C and D were (4.29±2.57)%,(4.31±2.08)%,(1.23±1.06)% and (3.98±2.26)%, respectively. Percentages of NKT and NK cells, CD4+/CD8+, and the HLA antibody positive rate in groups A and B had no significant difference compared with those in group D. The percentage of CD3+CD16+CD56+NKT cells was lower in group C compared with that in group D (P<0.05). Percentages of NK cells and CD4+/CD8+, and the HLA antibody positive rate in group C were significantly higher than in group D(P<0.05). **Conclusion** CD3+CD16+CD56+ NKT cells are lowly expressed when rejection occurs, and HLA antibodies occur in these patients. Expression of NKT cells is normal and stable in patients without rejection, and is not affected by CNI concentrations. NKT cells play an important role in immunosuppression in patients after renal transplantation.

Keywords: Natural killer T cells; Renal transplantation; Rejection

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