

病毒性肝炎与艾滋病专栏

中国HIV感染者的IL-21水平及其在高效抗反转录病毒治疗中的动态变化

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摘要:

目的: 观察在接受抗HIV治疗的中国HIV感染者队列中血白细胞介素21(IL-21)的动态变化。方法: 将符合高效抗反转录病毒治疗(HAART)指南标准的25例慢性HIV成年感染者纳入研究, 在启动HAART的0, 6, 12个月时各抽取感染者的20 mL血液。运用流式细胞仪进行CD4<sup>+</sup>T细胞和CD8<sup>+</sup>T细胞计数, 以RT-PCR检测HIV的RNA水平, ELISA法测定IL-21的水平。结果: 中国HIV感染者的IL-21水平低于正常人, 在接受HAART治疗过程中逐渐升高, 但未达到正常人水平。IL-21的水平和CD4<sup>+</sup>T细胞数呈正相关, 但与CD8<sup>+</sup>T细胞数无关; HIV RNA的水平与CD4<sup>+</sup>T细胞数呈负相关, 但与CD8<sup>+</sup>T细胞数无关。结论: IL-21与HIV免疫致病机制有一定关系, 并在抗反转录病毒治疗的免疫重建中起重要作用。

关键词: 人类免疫缺陷病毒 高效抗反转录病毒治疗 白介素21 CD4细胞 CD8细胞 HIV RNA

IL-21 level in Chinese HIV infected individuals and its dynamics undergoing HAART

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Abstract:

Objective To investigate the dynamics of interleukin-21(IL-21) cytokine in the Chinese HIV patients undergoing highly active antiretroviral therapy (HAART). Methods A total of 25 adults with chronic HIV infections, responding to combined highly active antiretroviral therapy (HAART) guideline criteria were enrolled for a 1-year follow-up. After signing an informed consent, 20 mL blood was collected from each patient at the base line, 6 month and 12 month, respectively. CD4 and CD8 cell count was quantified by flux cytometry, serum HIV RNA quantified by real time PCR and IL-21 concentrations by ELISA. Results IL-21 levels increased gradually during the follow-up but did not reach the healthy levels. IL-21 correlated positively with the CD4 cells but not with CD8 T cells. HIV RNA correlated negatively with CD4 cell count but did not show any relationship with the CD8 cells. Conclusion IL-21 has potential role in the immunopathogenesis of HIV, and might be an important factor in immune construction during HAART.

Keywords: human immunodeficiency virus highly active antiretroviral therapy interleukin-21 CD4 cell CD8 cell HIV RNA

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