

论著

慢性乙型肝炎患者树突状细胞分泌IL-12功能的初步研究

向瑛¹, 范学工¹, 黄振宇², 李宁¹

1中南大学湘雅医院, 湖南长沙410008; 2平江县人民医院, 湖南岳阳414500

摘要:

目的探讨乙型肝炎病毒(HBV)感染状态下树突状细胞(DCs)的免疫功能。方法运用荧光定量聚合酶链反应(PCR)法,对12例慢性乙型肝炎血清HBV DNA阳性及10例血清HBV DNA阴性患者外周血来源DCs内的HBV DNA进行检测,并比较不同HBV滴度时DCs分泌白细胞介素(IL-12)的功能,同时收集肝炎病毒标志物阴性,肝功能正常的健康志愿者10例作对照。结果12例血清HBV DNA阳性患者中有7例DCs内可检测到HBV DNA,检出率为58.33%。血清HBV DNA阳性组DCs培养上清IL-12水平明显低于血清HBV DNA阴性组及对照组(均P<0.01);而IL-12的表达水平在DCs HBV DNA阳性组明显低于DCs HBV DNA阴性组及对照组(均P<0.01)。结论慢性乙型肝炎患者外周血DCs亦能受到HBV的感染,感染了HBV的DCs,其IL-12分泌功能明显下降。

关键词: 肝炎,乙型,慢性; 肝炎病毒,乙型; 树突状细胞; 白细胞介素; IL-12

Function of dendritic cell to secrete interleukin-12 in patients with chronic hepatitis B

XIANG Ying¹, FAN Xue-gong¹, HUANG Zhen-yu², LI Ning¹

Xiangya Hospital, Central South University, Changsha 410008, China; 2 Pingjiang County Hospital, Yueyang 414500, China

Abstract:

[Abstract] Objective To study the immune function of dendritic cell (DCs) in HBV infected patients. Methods HBV DNA in DCs of 12 chronic hepatitis B (CHB) patients with serum positive HBV DNA and 10 CHB patients with serum negative HBV DNA were detected by fluorescent quantitative polymerase chain reaction, the function of secreting interleukin-12 (IL-12) by DCs under different titers of HBV was compared, 10 persons with negative HBV markers and normal liver function were as control. Results HBV DNA in DCs was detected in 7 of 12 (58.33%) CHB patients with positive HBV DNA. The levels of IL-12 in DCs supernatants of serum positive HBV DNA group were obviously lower than that of HBV DNA negative and healthy control group (both P<0.01); The expression levels of IL-12 in DCs HBV DNA positive group was obviously lower than that of DCs HBV DNA negative group and healthy control group (both P<0.01). Conclusion The DCs derived from peripheral blood in patients with CHB can be infected by HBV, the secretion function of IL-12 by HBV infected DCs decreased significantly

Keywords: hepatitis B, chronic; hepatitis B virus, chronic; dendritic cells; interleukin; interleukin-12

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通讯作者: 范学工

作者简介: 向瑛(1982-),女(汉族),湖南省平江县人,医师,主要从事传染病学研究。

作者Email: xgfan57@126.com

参考文献:

[1] Lok A S. Chronic hepatitis B [J]. N Engl J Med, 2002, 346(22): 1682-1683.
[2] Siegal F P, Kadowaki N, Shodell M, et al. The nature of the principal type 1 interferon-producing cells in human blood [J]. Science, 1999, 284 (5412): 1835-1837.
[3] Messmer D, Yang H, Telusma G, et al. High mobility group box protein 1: an endogenous signal for dendritic cell maturation and Th1 polarization [J]. J Immunol, 2004, 173(1): 307-313.
[4] 中华医学会肝病学分会,中华医学会感染病学分会.慢性乙型肝炎防治指南 [J]. 肝脏, 2005, 10(4): 348-357.

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- [5] Takaki A, Tatsukawa M, Koike K, et al. Mechanism of immune surveillance against HBV infection [J] . Nippon Rinsho, 2004, 62 (Suppl 8):62-65.
- [6] Arima S, Akbar S M, Michitaka K, et al. Impaired function of antigen presenting dendritic cells in patients with chronic hepatitis B: localization of HBV DNA and HBV RNA in blood DC by in situ hybridization [J] . Int J Mol Med ,2003,11(2): 169-174.
- [7] Munz C, Steinman R M, Fujii S. Dendritic cell maturation by innate lymphocytes: coordinated stimulation of innate and adaptive immunity [J] . J Exp Med ,2005 ,202 (2): 203-207.
- [8] 钱峰, 贺永文. 朱传武. 慢性乙型肝炎患者外周血树突状细胞表型及抗原提呈能力与HBV载量的关系 [J] . 肝脏, 2005,10(1):8-10.
- [9] Chouaib S, Chehimi J, Bani L, et al. Interleukin 12 induces the differentiation of major histocompatibility complex class I primed cytotoxic T lymphocyte precursors into allospecific cytotoxic effectors [J] . Proc Natl Acad Sci USA, 1994, 91(26):12659-12663.
- [10] Lung T L, Saurwein Teissl M, Parson W, et al. Unimpaired dendritic cells can be derived from monocytes in old age and can mobilize residual function in senescent T cells [J] . Vaccine, 2000, 18 (16):1606-1612.

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