

论著

OX40/OX40L mRNA在实验性变态反应性神经炎中的动态变化

张宁, 李刚, 肖波, 刘运海, 蔡艳, 孙新刚, 梁静慧

中南大学湘雅医院神经内科, 长沙 410008

摘要:

目的: 研究Oxford 40(OX40)和Oxford 40 ligand(OX40L)mRNA在实验性变态反应性神经炎(experimental allergic neuritis, EAN)大鼠坐骨神经、脾脏、外周血和淋巴结中的动态变化。方法: 36只Lewis大鼠随机分为EAN模型组和完全弗氏佐剂对照组(CFA组)。分别在第9天、第17天、第26天处死动物,采用反转录聚合酶链反应技术检测坐骨神经根、脾脏、外周血单个核细胞和淋巴结中OX40和OX40L mRNA的表达水平。结果: EAN组大鼠在抗原免疫后第17天达到发病高峰, OX40和OX40L mRNA在第9天(发病早期)和第17天时表达均较高, 与第26天(恢复期)相比, 差异有统计学意义( $P<0.05$ ), 各时间点与对照组相比差异有统计学意义( $P<0.05$ ); CFA组大鼠无症状; EAN组中OX40和OX40L mRNA在坐骨神经和淋巴结中各时间点表达均升高, 在外周血单个核细胞中微量表达。结论: OX40/OX40L可能与EAN发病有关。

关键词: 实验性变态反应性神经炎 吉兰-巴雷综合征 OX40:OX40L

Dynamic change OX40/OX40L mRNA in experimental allergic neuritis

ZHANG Ning, LI Gang, XIAO Bo, LIU Yunhai, CAI Yan, SUN Xingang, LIANG Jinghui

Department of Neurology, Xiangya Hospital, Central South University, Changsha 410008, China

Abstract:

Objective To examine the expression of mRNA of Oxford 40(OX40) and Oxford 40 ligand(OX40L) in the sciatic nerve, spleen, peripheral blood mononuclear cells and lymph nodes of experimental allergic neuritis (EAN). Methods Thirty-six Lewis rats were randomly assigned into an EAN group and a CFA group. The rats were sacrificed on 9th, 17th, and 26th day after immunization. OX40 and OX40L mRNA was detected by reverse transcription polymerase chain reaction in the spleen, sciatic nerves, peripheral blood mononuclear cells and lymph nodes. Results The peak of clinical course came on 17th day after the immunization in EAN. The mRNA expression of OX40/OX40L was higher on 8th day and 17th day than that on 26th day after the immunization ( $P<0.05$ ). There was significant difference between the EAN group and the CFA group at the 3 time points ( $P<0.05$ ); rats in the CFA group didn't have any clinical manifestations. The mRNA expression of OX40 and OX40L in the EAN group raised in the sciatic nerves and lymph nodes at the above 3 time points ( $P<0.05$ ). Weak expression was seen in the peripheral blood mononuclear cells. Conclusion OX40 and OX40L may play a role in the pathogenesis of experimental allergic neuritis.

Keywords: experimental allergic neuritis; Guillain-Barre's syndrome; oxford40; oxford 40 ligand

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通讯作者: 张宁

作者简介:

作者Email: zhnxyyy63@vip.sina.com

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