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颞叶内侧癫痫患者颞叶皮层致痫灶中Nogo-A信号通路到:

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Title: Expression of Nogo-A signaling pathway in temporal lobe cortex from mesial temporal lobe epilepsy patients

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关键词: [癫痫](#); [Nogo-A](#); [NgR](#); [P75\(NTR\)](#); [Troy](#); [Lingo-1](#)

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摘要: 目的 研究Nogo-A及其下游信号通路在MTLE患者颞叶皮层的表达,探讨其在癫痫后异常神经环路形成过程中的作用。 方法 收集本科MTLE患者颞叶皮层标本12例与正常颞叶皮层标本12例,采用RT-PCR、Western blot、免疫组化方法检测Nogo-A、NgR、P75(NTR)、Lingo-1、Troy表达情况。 结果 MTLE患者颞叶皮层致痫灶中出现神经元丢失、细胞排列结构紊乱、极性消失和胶质增生等病理改变。与正常对照相比,MTLE患者颞叶皮层Nogo-A mRNA和蛋白表达显著降低($P<0.01$), NgR mRNA和蛋白表达显著升高($P<0.01$); Nogo-A蛋白在神经元中表达显著升高($P<0.01$),而在胶质细胞中表达显著降低($P<0.01$); NgR、P75(NTR)、Troy、Lingo-1蛋白主要表达于神经元中,其中前三者表达均显著升高($P<0.05$, $P<0.01$),而Lingo-1蛋白表达降低不显著($P>0.05$)。 结论 Nogo-A及其下游信号通路在MTLE患者颞叶皮层中的表达发生改变,提示其非常可能参与了异常神经环路的形成过程。

Abstract: **Objective** To determine the expression of Nogo-A signaling pathway in the temporal lobe from mesial temporal lobe epilepsy (MTLE) patients and investigate its potential role in the formation of abnormal neural networks after epileptic seizure. **Methods** Twelve tissue samples of temporal lobe from diagnosed intractable MTLE patients during operation and 12 samples of normal temporal lobe due to traumatic wound debridement or tumor craniotomy were collected after informed consent signed and approval of the Ethics Committee of

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our hospital in our department from June 2011 to June 2012. The expression of Nogo-A, NgR, P75(NTR), Lingo-1 and Troy was detected by RT-PCR, Western blotting and immunohistochemical assay. Results There were such pathological changes in the temporal lobe cortex from MTLE patients as neuron loss, disarranged order, neuron polarity loss, and gliosis. The expression of Nogo-A at mRNA and protein levels in MTLE patients was significantly down-regulated ($P<0.01$), while that of NgR was significantly up-regulated ($P<0.01$) when normal individuals. The Nogo-A protein expression was significantly higher in the neurons ($P<0.01$), but significantly mild in glial cells ($P<0.01$). NgR, P75(NTR), Troy and Lingo-1 proteins were mainly expressed in the neurons, which were significantly up-regulated ($P<0.05$, $P<0.01$) except Lingo-1 down-regulated though not significantly ($P>0.05$). Conclusion The expression of Nogo-A and its downstream signaling pathway is changed in the MTLE patients' temporal lobe cortex, suggesting that it might be involved in the formation of abnormal neuronal networks.

参考文献/REFERENCES:

朱孔江, 李松, 徐广振, 等. 颞叶内侧癫痫患者颞叶皮层致痫灶中Nogo-A信号通路的表达[J]. 第三军医大学学报, 2013, 35(11): 1076-1079.

相似文献/REFERENCES:

[1] 李哲, 李健, 李攀, 等. 3种抗癫痫新药对部分性癫痫患者的临床疗效及脑电的影响[J]. 第三军医大学学报, 2012, 34(17): 1800.

[2] 杨辉. 神经电刺激技术在癫痫治疗中的应用[J]. 第三军医大学学报, 2012, 34(22): 2235.

Yang Hui. Brain electric stimulation in treatment of epilepsy[J]. J Third Mil Med Univ, 2012, 34(11): 2235.

[3] 张政, 罗勇军, 晏宁, 等. GABBR1基因G1465A多态与中国汉族青少年肌阵挛癫痫的关系[J]. 第三军医大学学报, 2007, 29(15): 1488.

ZHANG Zheng, LUO Yong-jun, YAN Ning, et al. G1465A polymorphism of GABBR1 gene is associated with juvenile myoclonic epilepsy in Chinese Han nationality[J]. J Third Mil Med Univ, 2007, 29(11): 1488.

[4] 孔敏, 蒋莉, 洪思琪, 等. 癫痫儿童外周血P-糖蛋白水平在预测儿童抗癫痫药物疗效中的作用[J]. 第三军医大学学报, 2013, 35(02): 153.

Kong Min, Jiang Li, Hong Siqi, et al. Role of peripheral P-glycoprotein in predicting efficacy of antiepileptic drugs in epilepsy children[J]. J Third Mil Med Univ, 2013, 35(11): 153.

[5] 伍芳, 龚标, 李学智, 等. 电针对局灶性脑梗死大鼠Nogo-A及其受体NgR和运动诱发电位的影响[J]. 第三军医大学学报, 2013, 35(03): 228.

Wu Fang, Gong Biao, Li Xuezhi, et al. Effect of electroacupuncture on motor evoked potential and expression of Nogo-A and its receptor NgR in rats with focal cerebral ischemia[J]. J Third Mil Med Univ, 2013, 35(11): 228.

[6] 王佩, 王海祥, 刘瑞春, 等. 尼莫地平对癫痫大鼠海马Ca²⁺浓度及Ca²⁺/钙调蛋白依赖性蛋白激酶II α 表达的影响[J]. 第三军医大学学报, 2008, 30(03): 226.

WANG Pei, WANG Hai-xiang, LIU Rui-chun, et al. Effect of nimodipine on Ca²⁺ concentration and calcium/calmodulin-dependent protein kinase II α expression in hippocampus of epileptic rats[J]. J Third Mil Med Univ, 2008, 30(11): 226.

[7] 何选丽, 晏勇, 马勋泰, 等. 卡莫司汀诱导大鼠皮质发育障碍模型的研究[J]. 第三军医大学学报, 2007, 29(17): 1729.

[8] 魏璐, 蔡文琴, 杨忠. 雌激素对癫痫大鼠海马区胶质细胞增生和突触可塑性变化的影响[J]. 第三军医大学学报, 2006, 28(04): 327.

[9] 耿明英, 程远, 许民辉, 等. 伽玛刀对红藻氨酸模型大鼠海马形态学及苔藓纤维变化的影响[J]. 第三军医大学学报, 2007, 29(10): 959.

GENG Ming-ying, CHENG Yuan, XU Min-hui, et al. Effects of gamma knife on morphological changes of hippocampal formation and mossy fiber sprouting in epileptic rats induced by kainic acid[J]. J Third Mil Med Univ, 2007, 29(11): 959.

[10] 王雨, 王爱民, 杜全印, 等. 肾性癫痫致双侧股骨颈骨折1例[J]. 第三军医大学学报, 2006, 28(24): 2443.