

5-LOX-CysLTs-CysLTsR 表达规律及黄芩苷- 栀子苷配伍对大鼠脑缺血抗炎作用机制研究*

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摘要:目的 动态观察脑卒中大鼠脑组织半胱氨酰白三烯(CysLTs)活性及其5-脂氧酶(5-LOX)、半胱氨酰白三烯受体1(CysLTs1)、半胱氨酰白三烯受体2(CysLTs2)表达水平变化规律,探讨黄芩苷-栀子苷(7:3)配伍抗脑缺血炎症损伤机制。方法 线栓法制备大鼠中动脉堵塞模拟脑缺血模型,模型成功后随机分为空白对照组(Control)、模型组(pMCAO)、黄芩苷-栀子苷(7:3)30mg/kg、45mg/kg、60mg/kg组、齐留通45mg/kg组、孟鲁司特0.5mg/kg组,持续35d给药治疗,每隔7d,神经功能评分观察神经保护作用,酶联免疫吸附实验(ELISA)法测脑组织CysLTs含量;蛋白质印迹(Western Blot)法检测脑组织5-LOX、CysLTs1、CysLTs2蛋白表达水平。结果 与模型组相比,黄芩苷-栀子苷(7:3)30mg/kg、45mg/kg、60mg/kg组在脑缺血28d内可显著降低了CysLTs水平;Western Blot结果显示,5-LOX、CysLTs1和CysLTs2蛋白表达明显降低;至恢复期35d,各蛋白表达水平已无显著性差异。结论 黄芩苷-栀子苷(7:3)配伍可减轻MCAO大鼠的神经功能障碍,其作用机制可能与抑制5-LOX活性、降低CysLTs1和CysLTs2蛋白表达有关。

关键词:脑缺血;黄芩苷;栀子苷;5-LOX/CysLTs/CysLT通路

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Study on the Expression Pattern of 5-LOX-CysLTs-CysLTsR and the Anti-inflammatory Mechanism of Baicalin-Germanuin on Cerebral Ischemia in Rats

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Abstract: Objective To dynamically observe cysteinyl leukotriene (CysLTs) activity in brain tissue of stroke rats and its 5-lipoxygenase (5-LOX), cysteinyl leukotriene receptor 1 (CysLTs1), cysteinyl The change of expression level of leukotriene receptor 2 (CysLTs2), and to investigate the mechanism of anti-cerebral ischemic injury induced by baicalin-germanoside (7:3). **Methods** The model of middle cerebral artery occlusion simulated cerebral ischemia was prepared by suture embolism. The model was then randomly divided into blank control group (control), model group (pMCAO), baicalin-geniposide (7:3) 30 mg/kg, 45 mg/kg, 60 mg/kg groups, ziliutong 45 mg/kg group and montelukast 0.5 mg/kg group. The treatment lasted 35 days. Neuroprotective effect was observed by neurological function score every

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