张丽萍,张 曼,陈友友,张伯礼.加味温胆汤对抑郁模型大鼠学习记忆能力及海马cAMP-PKA途径的影响[J].中国康复医学杂志,2008,(12):1082~1085

加味温胆汤对抑郁模型大鼠学习记忆能力及海马cAMP-PKA途径的影响

点此下载全文

张丽萍 张 曼 陈友友 张伯礼

天津中医药大学，天津市南开区卫津路双峰道154号天津中医药大学文理部201室，300193

基金项目：中国博士后科学基金资助项目（20070410200）

DOI：

摘要：

目的：探讨加味温胆汤对抑郁模型大鼠学习记忆能力及海马信号转导cAMP-PKA途径的影响。方法：32只SD大鼠随机分为正常组、模型组、盐酸氟西汀组及加味温胆汤组，每组8只，应用孤养加慢性轻度不可预见性应激方法造模，采用Morris水迷宫实验测试大鼠空间学习记忆能力、放射免疫法测定海马cAMP含量，以及免疫组化SABC法测定海马区PKA蛋白表达水平。结果：模型组大鼠学习记忆能力显著下降（P<0.01），海马cAMP含量增加（P＜0.05）、PKA表达显著减少（P<0.01）。中、西药组与模型组比较，学习记忆能力增强（P<0.05）， cAMP含量下降（P<0.05），PKA蛋白表达显著上升（P<0.05）。结论:加味温胆汤可增强抑郁症大鼠学习与记忆能力，其影响机制可能与海马信号传导cAMP-PKA途径有关。

关键词：抑郁症 加味温胆汤 学习记忆 环化腺苷酸 蛋白激酶A

Effects of Jiawei Wendan decoction on learning and memory and cAMP-PKA pathway of hippocampal signal transduction in rats model of depression

Download Fulltext

Tianjin University of Traditional Chinese Medicine ,Tianjin, 300193

Fund Project:

Abstract:

Objective:To observe effects of Jiawei Wendan decoction on learning and memory and cAMP-PKA pathway of hippocampal signal transduction in depressive rat models. Method: Depressive rat model was established by separation and chronic unpredictable mild stress. Thirty-two SD rats were selected and randomly divided into normal group, model group, Prozac group and Jiawei Wendan decoction group with 8 rats in each group. All rats were tested for spatial learning and memory in Morris water maze. Contents of cAMP were detected by radio-immunity assay, and the expression of PKA in CA3 region of the hippocampus was assayed by using immunohistochemical method. Result: Scores of spatial learning and memory lowered remarkably in model group, contents of cAMP increased and expressions of PKA remarkably reduced in hippocampus of model rats（P<0.01）.Compared with model group, scores of spatial learning and memory increased obviously（P<0.05）, contents of cAMP reduced（P<0.05） and expressions of PKA increased in drugs groups（P<0.05）.Conclusion: These results indicate that Jiawei Wendan decoction can enhance the hippocampus-dependent spatial learning and memory function, and cAMP-PKA pathway of hippocampal signal transduction may participate in the mechanism of enhanced performance.

Keywords:depression Jiawei Wendan decoction learning and memory cyclic adenosine monophosphate protein kinase A

查看全文 查看/发表评论 下载PDF阅读器