安宫牛黄丸对大鼠自发性脑出血模型血肿周围
脑组织氨基酸表达及超微结构的影响研究

付宪文1, 赵继宗2, 王盛3

1. 河北省承德市中心医院神经外科，河北承德 067000
2. 首都医科大学附属北京天坛医院神经外科，北京 100050

摘要: 目的: 自发性脑内出血病死率高, 现代医学无论是外科治疗还是内科治疗效果均不理想。由于血肿形成的原发性或继发性因素已无法恢复, 继发性的脑损害预防才是治疗的关键。综观研究结果, 发病机理包括出血和机体的反应。对血肿周围脑组织的细胞结构加以研究, 可以为临床治疗提供依据。

方法: 采用大鼠自发性脑内出血模型, 实验组给予安宫牛黄丸治疗, 对照组给予等量生理盐水。第3天检测血肿周围脑组织的细胞结构变化。

结果: 安宫牛黄丸可以显著减少血肿周围脑组织的细胞结构损害。

结论: 安宫牛黄丸对大鼠自发性脑内出血模型血肿周围脑组织的细胞结构有显著的保护作用。
Study the effect of Angong Níu huan pill on rats with experimental intracerebral hemorrhage during acute period on the expression of amino acids and ultrastructure around hematoma

FU Xian-wen, et al

(The Central Hospital of Chengde, Hebei Chengde 067000 China)

Abstract Objective To observe the protective effect of Angong Níu huan pill on secondary brain injury following intracerebral hemorrhage Methods 75 rats were randomly divided into control group, contrast group, model group and test group. Test group had been treated by Angong Níu huan pill or the Simplified prescription (realgar and cinnabar are removed from the original pill) 1 week before operation. EH models was induced in rats by autologous blood injection to the the right globas pallidus. The high performance liquid chromatography (HPLC) was used to determine the changes of excitatory amino acids GKH, Asp and inhibitory amino acids GABA, Gly, Gln in brain tissues around the hematoma in rats. Transmission electron microscope was used to observe the ultrastructure changes of brain tissues around intracerebral hemorrhage Results (1) The expression of GKH, Asp, GABA was significantly increased in model groups than normal groups and control groups (p < 0.01); The expression of GKH was significantly increased in control groups than normal groups (p < 0.01); No difference was found between control groups, normal groups and model groups on GKH in treatment group. The expression of GKH, Asp was significantly reduced and the expression of GKH was significantly increased (p < 0.01); No changes was found about GABA, Gly (2) 4h after blood injection, the damage of neurons, gliocytes and capillaries were appeared obviously (3) All the cases showed capillary impartment in contrast group, model group and test group both after 4h and 24h operation (4) No remarkable neurons, gliocytes and capillaries change was observed in the test group treated by Angong Níu huan pill (4) Nerve fibers were almost structurally normal in all the specimens in this study. Conclusion Angong Níu huan pill has a protective effect against the secondary brain injury following intracerebral hemorrhage in rats which is correlated to the reduce EAAs in the brain tissue in rats

Keywords Angong Níu huan pill Intracerebral hemorrhage Rat Amino acids Ultrastructure