

论著

## 银杏叶提取物对血管性痴呆大鼠海马突触素表达的影响

张兰英, 王玉良<sup>△</sup>

潍坊医学院生理学教研室, 山东 潍坊 261042

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**摘要** 目的: 研究银杏叶提取物(EGb761)对血管性痴呆模型大鼠海马突触素表达的影响。  
方法: 以双侧颈总动脉反复夹闭再通同时腹腔注射硝普钠建立血管性痴呆模型大鼠, 采用Morris 水迷宫和免疫组化方法分别观察大鼠空间学习记忆能力及海马突触素(SYN)表达情况。  
结果: 模型组大鼠在1月、2月和4月不同时点测得的Morris水迷宫逃避潜伏期(EL)均较假手术组明显延长( $P < 0.01$ ), 药物组EL均显著短于模型组, 但仍长于假手术组( $P < 0.05$ 或 $P < 0.01$ ); 模型组海马SYN表达弱于假手术组, 而药物组海马SYN表达高于模型组( $P < 0.01$ )。

结论: EGb761增加海马结构SYN表达可能是其改善VD大鼠学习记忆障碍的重要机制。

**关键词** [二裂银杏](#); [痴呆, 血管性](#); [突触囊泡蛋白](#); [海马](#)

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## Effects of EGb761 on synaptophysin expression in hippocampus of vascular dementia rats

ZHANG Lan-ying, WANG Yu-liang

Department of Physiology, Weifang Medical College, Weifang 261042, China. E-mail: wangy1@wfmc.edu.cn

### Abstract

<FONT face=Verdana>AIM: To investigate the effects of Ginkgo biloba extract 761 (Egb761) on synaptophysin (SYN) expression in hippocampus of vascular dementia (VD) rats. <BR>METHODS: VD rat models, established by repeatedly cerebral ischemia/reperfusion, were randomly divided into two groups: model group and EGb761 treated group (both n=30), and another 30 condition-matched rats were selected as the sham-operated controls. Spatial learning and memory abilities of rats were assessed by Morris water maze (MWM) task, and SYN expression in hippocampal formation of rats in different groups was detected by immunohistochemical technique and image analysis. <BR>RESULTS: The MWM escape latency (EL) in model group was highly longer than that in the sham-operated group ( $P < 0.01$ ), while the EL of EGb761-treated group was significantly shorter than that in model group, but still longer than that in the sham-operated group at 1 m, 2 m and 4 m after VD modeling operation ( $P < 0.05$  or  $P < 0.01$ ). Immunohistochemical analysis showed that the SYN immunoreactive expression in hippocampal formation in model group greatly decreased and mean optical density of SYN expression highly increased compared with both sham-operated group and EGb761-treated group at three time points ( $P < 0.01$ ). <BR>CONCLUSION: EGb761 can increase the expression of SYN in hippocampus, which may be one of important mechanisms of EGb761 in improving learning and memory dysfunction of VD rats. </FONT>

**Key words** [Ginkgo biloba](#) [Dementia](#) [vascular](#) [Synaptophysin](#) [Hippocampus](#)

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通讯作者 王玉良 [wangyl@wfmc.edu.cn](mailto:wangyl@wfmc.edu.cn)

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