

## 实验研究

## 头痛宁胶囊治疗偏头痛的药效学研究\*

刘静<sup>1</sup> 郭珍<sup>2</sup> 李蕾<sup>3</sup> 邓肿<sup>4</sup> 颜永刚<sup>4</sup> 张慧<sup>2</sup>(1. 延安大学咸阳医院, 陕西 咸阳 712000; 2. 陕西中医药大学附属医院, 陕西 咸阳 712000;  
3. 山西中医学院第三中医院, 山西 太原 030000; 4. 陕西中医药大学, 陕西 咸阳 712000)

**摘要:**目的 观察头痛宁胶囊对冰醋酸所致小鼠扭体反应、小鼠断头后张口呼吸时间、急性血瘀大鼠血流变和血浆内皮素(ET-1)影响,为头痛宁胶囊临床应用提供实验依据。**方法** 采用小鼠扭体法及断头法进行镇痛实验和耐缺氧实验;采用注射肾上腺素-冰水浴法制作大鼠急性血瘀模型,设立正天丸对照组,比较两组大鼠血流变学中的全血粘度、血浆粘度、全血还原粘度、红细胞聚集指数、纤维蛋白原和血浆ET-1。**结果** 头痛宁胶囊可延长扭体小鼠的潜伏期、减少扭体次数、延长断头小鼠张口呼吸时间、明显降低血浆粘度、全血还原粘度、红细胞的聚集,血液的粘度及血浆ET-1的含量。**结论** 头痛宁胶囊具有显著的镇痛、耐缺氧、改善血液流变性、降低血浆内皮素含量、改善脑供血的作用,可预防和治疗偏头痛。

**关键词:**头痛宁胶囊;偏头痛;药效学研究

中图分类号:R289.5 文献标识码:A 文章编号:2096-1340(2018)04-0096-05

DOI:10.13424/j.cnki.jsctcm.2018.04.031

## Pharmacodynamic Study of Toutongning Capsule in Treating Migraine

Liu Jing<sup>1</sup>, Guo Zhen<sup>2</sup>, Li Lei<sup>3</sup>, Deng Chong<sup>4</sup>, Yan Yonggang<sup>4</sup>, Zhang Hui<sup>2</sup>

(1. Affiliated Hospital of Yan'an University in Xianyang, Xianyang China, 712000;

2. Affiliated Hospital of Shaanxi University of Chinese Medicine, Xianyang China, 712000;

3. The Third TCM Hospital of Shanxi University of Chinese Medicine, Taiyuan China, 030000;

4. Shaanxi University of Chinese Medicine, Xianyang China, 712046)

**Abstract Objective:** To observe the effect of Toutongning Capsule on acetic acid-induced writhing in mice, duration of mouth breathing after decapitation, blood rheology and plasma endothelin-1 (ET-1) in rats of acute blood stasis, and provide experimental basis for clinical application of Toutongning Capsules. **Method:** Analgesic and hypoxic-tolerance experiments were performed using the mouse writhing method and the decapitation method; the acute blood stasis model was established by the injection of epinephrine-ice water bath and the Zhengtian Pill control group was established. The whole blood viscosity, plasma viscosity, whole blood reduced viscosity, erythrocyte aggregation index, fibrinogen and plasma ET-1 in the blood rheology of the two groups were compared. **Result:** Toutongning Capsule can prolong the latency of writhing mice, reduce the number of writhing, prolong the mouth breathing time of the decapitated mice, significantly reduce plasma viscosity, reduced viscosity of whole blood, aggregation of red blood cells, blood viscosity and plasma ET-1 content. **Conclusion:** Toutongning Capsule has significant effect in analgesia, hypoxia tolerance, improving blood rheology, reducing plasma endothelin levels, and improving cerebral blood supply, and it can be used to prevent and treat migraine.

**Keywords** Toutongning Capsule; migraine; pharmacodynamic study