

于翠萍,王琦,何明伟,杨立强,安建雄,倪家骥.双氯芬酸钠对大鼠神经病理性疼痛的疗效及机制[J].中国康复医学杂志,2009,(10):872-875

双氯芬酸钠对大鼠神经病理性疼痛的疗效及机制 [点此下载全文](#)

[于翠萍](#) [王琦](#) [何明伟](#) [杨立强](#) [安建雄](#) [倪家骥](#)

首都医科大学宣武医院疼痛科,北京,100053

基金项目:北京市科委课题项目(Y0204003040631)

DOI:

摘要点击次数: 100

全文下载次数: 51

摘要:

目的:观察不同剂量双氯芬酸钠灌胃对坐骨神经结扎(CCI)大鼠机械痛阈、背根神经节(DRG)及脊髓背角P物质(SP)、降钙素基因相关肽(CGRP)表达及胃肠黏膜的影响。方法:SD大鼠随机分为坐骨神经结扎后慢性缩窄性损伤(CCI)组(n=32)和假手术组(n=8)。自术后第8天分别给予不同剂量双氯芬酸钠灌胃,测定灌胃前及灌胃第1、3、5、7天时大鼠右后肢机械刺激缩足反射阈值(PWMT)及用药7d后测定L4/5背根神经节细胞及腰膨大处(L4/5节段)脊髓背角SP和CGRP表达。结果:①对照组、2mg/kg组、4mg/kg组、10mg/kg组在用药前及用药后各时间点的右后肢PWMT与假手术组相比显著降低。4mg/kg组在用药第5、7天时右后肢PWMT与用药前及对照组相比显著增加;10mg/kg组用药后各时间点右后肢PWMT与用药前及对照组相比显著增加。②对大鼠背根神经节及脊髓背角SP、CGRP表达的影响。对照组、2mg/kg组、4mg/kg组、10mg/kg组SP及CGRP表达的平均光密度值均明显高于假手术组。4mg/kg组、10mg/kg组SP及CGRP表达的平均光密度值明显低于对照组。③用药后,4mg/kg与10mg/kg两组可见胃肠黏膜损伤,而2mg/kg组则无。结论:一定剂量双氯芬酸钠灌胃能够减轻CCI大鼠机械性痛敏反应,但对胃肠黏膜有一定损伤,两者均具有剂量依赖效应。

关键词: [双氯芬酸钠](#) [背根神经节](#) [背角](#) [神经病理性疼痛](#) [P物质](#)

The efficacy and mechanism of diclofenac sodium on the neuropathic pain in rats [Download Fulltext](#)

Xuanwu Hospital Attached To Capital Medical University, Beijing, 100053

Fund Project:

Abstract:

Objective: To observe the effects of diclofenac sodium on mechanical hyperalgesia, substance P(SP) and calcitonin gene-related peptide(CGRP) expressions in dorsal root ganglion(DRG) neurons and dorsal horn, as well as the structure of gastrointestinal mucosa in chronic constriction injury(CCI) rats after ligation of sciatic nerve. Method: Forty male SD rats were randomly divided into 5 groups: sham operation group, control group (CCI, ligation only), diclofenac sodium 2mg/kg group, diclofenac sodium 4mg/kg group and diclofenac sodium 10mg/kg group. From the 8th day post-ligation, different doses of diclofenac sodium were administered by injecting into gastric cavity twice per day for 7 days in different groups respectively. Before and the 1st,3rd,5th,7th day after drug injection, the posterior paw withdrawal mechanical threshold(PWMT) was measured by Von Frey hair, and at the 7th day after injection expressions of SP and CGRP in L4/5 dorsal root ganglion neurons and dorsal horn were detected by immunohistochemistry method. Result: ①Pre-drug and at different time points post-drug, the right posterior PWMTs in control group and three diclofenac sodium groups decreased significantly compared with that in sham operation group. At the 5th and 7th day post-drug, the PWMTs in 4mg/kg group increased significantly compared with that in pre-drug and control group. At different time points post-drug, the PWMTs in 10mg/kg group increased significantly compared with that in pre-drug and control group. ②At the 7th day post-drug, in control group and three diclofenac sodium groups, the average optical density(OD) of SP and CGRP in right L4-5 DRG and dorsal horn neurons increased significantly compared with that in sham operation group. ③There were structure injury of gastrointestinal mucosa in 4mg/kg and 10mg/kg groups, and no injury in 2mg/kg group. Conclusion: Diclofenac sodium can dose-dependently decrease the mechanical hyperalgesia and cause structure injury of gastrointestinal mucosa. The mechanism might be reducing SP and CGRP expressions in DRG neurons and dorsal horn in CCI rats.

Keywords: [diclofenac sodium](#) [dorsal root ganglion](#) [dorsal horn](#) [neuropathic pain](#) [substance P](#)

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

您是本站第 534609 位访问者

版权所有: 中国康复医学会

主管单位: 卫生部 主办单位: 中国康复医学会

地址: 北京市和平街北口中日友好医院 邮政编码: 100029 电话: 010-64218095 传真: 010-64218095

本系统由北京勤云科技发展有限公司设计