

论文

前胡丙素与硝苯啉对大鼠工作心脏缺血再灌注损伤的保护作用

杨解人;李庆平;饶曼人

南京医学院心血管药理研究室,南京210029; \*\*皖南医学院药理教研室,芜湖241001

摘要:

大鼠ip前胡丙素(Pra-C 15 mg/kg,bid×3d)和硝苯啉(Nif 60μg/kg,bid×3d),使离体缺血再灌注工作心脏的收缩(AP,LVSP,+dP/dt<sub>max</sub>)舒张(-dP/dt<sub>max</sub> LVEDP和T值)性能在35min时得到改善,尤以舒张性能改善明显,并能促进CO,CF,SV及HR恢复,改善心脏工作效率,减少CK释放和心肌线粒体钙含量,表明Pra-C和Nif对心肌缺血都有保护作用,Pra-C的效应与Nif相近。

关键词: 前胡丙素 硝苯啉 离体心脏 血流动力学 线粒体

PROTECTIVE EFFECTS OF PRAERUPTORIN C AND NIFEDIPINE ON ISCHEMIA-REPERFUSED INJURY IN WORKING RAT HEARTS

JR Yang;QP Li;MR Rao

Abstract:

The effects of praeruptorin C (Pra-C, 15 mg/kg, bid×3d, ip) on global myocardial ischemia and reperfusion were investigated in the isolated working rat hearts. The results at 35min after reperfusion showed that as compared with the values before ischemia, AP, LVSP, +dP/dt<sub>max</sub>, -dP/dt<sub>max</sub>, LVEDP and T were recovered up to 80±19%, 82±16%, 78±21%, 85±11%, 136±77% and 133±21%, respectively. The corresponding parameters of Nifedipine (Nif,60 μg/kg, bid×3 d,ip) were 80±16%,97±30%,102±24%,106±32%,129±41% and 145±46%,respectively. The CF,SV and HR were recovered by 81±11%,104±20% and 78±7%when using Pra-C and 86±11%, 106±25% and 82±11%, respectively, when using Nif. Add-itionally ,in comparison of Pra-C and Nif with the ischemia group,the levels of creatine kinase releasedfrom cardiac cells decreased by 30% and 40%;while calcium accumulation in myocardial mitochondria were 41% and 46% ,respectively. The study suggests that the protective effects of Pra-Con myocardial cells in the isolated working rat heart during myocardial ischemia are similar to those Nif.

Keywords: Nifedipine Isolated working heart Hemodynamics Mitochondria Praeruptorin C

收稿日期 1992-02-09 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

参考文献:

本刊中的类似文章

1. 饶曼人;刘宛斌;刘培庆;.前胡丙素对高血压大鼠血管肥厚、细胞内钙、胶原及NO的影响[J]. 药学报, 2001,36(3): 165-169
2. 饶曼人;陈丹.前胡丙素对高血压大鼠血压及犬血管阻力的影响[J]. 药学报, 2001,36(11): 803-806
3. 饶曼人;刘宛斌;张晓文.前胡丙素对Ang II致离体血管平滑肌细胞肥厚及胞内钙、NO含量和信号转导的影响[J]. 药学报, 2002,37(1): 5-5
4. 吴献礼;孔令义;闵知大.白花前胡丙素的结构修饰研究[J]. 药学报, 2002,37(7): 527-534
5. 孔令义;吴献礼;闵知大.白花前胡丙素C-3'和C-4'反式结构类似物的半合成白花前胡丙素C-3'和C-4'反式结构类

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(308KB)
- ▶ [HTML全文]
- ▶ 参考文献

服务与反馈

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

本文关键词相关文章

- ▶ 前胡丙素
- ▶ 硝苯啉
- ▶ 离体心脏
- ▶ 血流动力学
- ▶ 线粒体

本文作者相关文章

- ▶ 杨解人
- ▶ 李庆平
- ▶ 饶曼人

PubMed

- ▶ Article by
- ▶ Article by
- ▶ Article by

似物的半合成[J]. 药学学报, 2003,38(5): 358-363

6. 孙兰;饶曼人;刘培庆.前胡丙素对肾性高血压左室肥厚大鼠心功能、左室顺应性及心肌胶原含量的影响[J]. 药学学报, 1997,32(8): 578-582

7. 吴欣;石成璋;吴晓冬.前胡丙素对培养大鼠心肌细胞内游离Ca<sup>2+</sup>的影响[J]. 药学学报, 1993,28(10): 728-731

文章评论 (请注意:本站实行文责自负, 请不要发表与学术无关的内容!评论内容不代表本站观点.)

|      |                      |      |                                   |
|------|----------------------|------|-----------------------------------|
| 反馈人  | <input type="text"/> | 邮箱地址 | <input type="text"/>              |
| 反馈标题 | <input type="text"/> | 验证码  | <input type="text" value="8328"/> |