

论文

TMB-8抑制5-HT和KCl引起大鼠脑血流量减少

王斌;张爱霞;邹颖;王娟;肖继皋

南京医科大学 药理学系, 江苏 南京 210029

摘要:

目的研究TMB-8对5-HT和KCl引起的大鼠脑血流量(CBF)减少的作用。方法用激光多普勒血流仪测量大鼠CBF,在人工脑脊液灌流液中加入TMB-8和工具药进行干预。结果12.5, 25和50 μmol·L⁻¹ TMB-8对大鼠CBF无明显影响,TMB-8可抑制5-HT引起的大鼠CBF减少。在1 μmol·L⁻¹ 5-HT引起大鼠CBF持续下降的状态下,TMB-8可浓度依赖的增加大鼠CBF。TMB-8也可抑制KCl引起的大鼠CBF减少。在20 mmol·L⁻¹ KCl引起大鼠CBF持续下降的状态下,TMB-8可浓度依赖的增加大鼠CBF。结论TMB-8可抑制5-HT和KCl引起的大鼠CBF减少,也可浓度依赖的增加被5-HT和KCl所减少的大鼠CBF,改善大鼠缺血区脑血供。

关键词: 8-(N,N-二乙胺)-n-辛基-3,4,5-三甲氧基苯甲酸酯 脑血流量 脑缺血 5-羟色胺 氯化钾

8-(N,N-diethylamino)-n-octyl-3,4,5-trimethoxybenzoate inhibited the reduction of cerebral blood flow evoked by 5-HT and KCl in rats

WANG Bin ; ZHANG Ai-xia; ZOU Ying; WANG Juan; XIAO Ji-gao

Abstract:

AimTo investigate the impact of 8-(N,N-diethylamino)-n-octyl-3,4,5-trimethoxybenzoate(TMB-8) on the change of cerebral blood flow(CBF) induced by 5-HT or KCl in rats.MethodsThe CBF in rats was measured by a Laser-Doppler flowmeter. The cranial window field was superfused with artificial cerebral spinal fluid containing TMB-8, 5-HT or KCl. Results12.5, 25 and 50 μmol·L⁻¹ TMB-8 showed no significant effect on rest CBF in rats. 12.5, 25 and 50 μmol·L⁻¹ TMB-8 apparently inhibited the decline of CBF evoked by 1 or 2 μmol·L⁻¹ 5-HT. When persistent reduction of CBF were evoked by 1 μmol·L⁻¹ 5-HT, TMB-8 markedly increased the CBF in a concentration-dependent manner. The reduction of CBF induced by 20 or 40 mmol·L⁻¹ KCl was also suppressed by 12.5, 25 and 50 μmol·L⁻¹ TMB-8. While persistent reduction of CBF was evoked by 20 mmol·L⁻¹ KCl. TMB-8 markedly increased the CBF in a concentration-dependent manner.ConclusionThese results indicate that TMB-8 is effective in preventing and treating the reduction of CBF induced by 5-HT or KCl, and improved the supply of blood in rat brain during ischemia.

Keywords: cerebral blood flow ischemia 5-HT KCl 8-(N,N-diethylamino)-n-octyl-3,4,5-trimethoxybenzoate

收稿日期 2002-06-24 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者: 王斌

作者简介:

参考文献:

本刊中的类似文章

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.)

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(137KB)
- ▶ [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

- ▶ 8-(N,N-二乙胺)-n-辛基-3,4,5-三甲氧基苯甲酸酯
- ▶ 脑血流量
- ▶ 脑缺血
- ▶ 5-羟色胺
- ▶ 氯化钾

本文作者相关文章

- ▶ 王斌
- ▶ 张爱霞
- ▶ 邹颖
- ▶ 王娟
- ▶ 肖继皋

PubMed

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

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="5388"/>