

论著

异钩藤碱对猫的心血管作用与血药浓度的关系

余俊先, 吴芹, 谢笑龙, 黄燮南, 孙安盛, 石京山*

(遵义医学院药理学教研室, 遵义 563003)

收稿日期 2001-11-5 修回日期 网络版发布日期 2009-1-15 接受日期 2002-4-2

摘要 目的 用麻醉猫研究异钩藤碱(Iso)的心血管药理效应与血药浓度的关系。方法 异钩藤碱粉末, 分别临用时配制(FPI)和配好后室温放置1周备用(DPI)。以RM 6000八道生理仪记录猫的收缩压、舒张压和心率的变化, 相应时间点取血1.0 mL。用反相高效液相色谱法测定血药浓度。结果 Iso的降压及负性频率效应与其给药剂量及血药浓度呈明显的量-效关系, 同剂量的DPI和FPI给药, FPI的起效时间、疗效维持时间及最大效应均强于DPI。结论 Iso的降压及负性频率效应与其给药剂量及血药浓度呈明显的量-效关系; Iso的溶液剂型不稳定, 室温放置1周后可降低其心血管药理效应。

关键词 [异钩藤碱](#) [药代动力学](#) [量-效关系](#)

分类号 [R972](#)

Relationship of cardiovascular effects and plasma concentration of isorhynchophylline in anesthetized cats

YU Jun-Xian, WU Qin, XIE Xiao-Long, HUANG Xie-Nan, SUN An-Sheng, SHI Jing-Shan*

(Department of Pharmacology, Zunyi Medical College, Zunyi 563003, China)

Abstract

AIM To explore the relationship of the cardiovascular effects and blood plasma concentration of isorhynchophylline(Iso) in anesthetized cats. **METHODS** The powder of Iso was dissolved by 0.1 mol·L⁻¹ HCl, and adapted pH to 6.0—6.5 with 0.1 mol·L⁻¹ NaOH and water just before use, or the preparation of Iso was placed for a week under room temperature before use. A catheter was performed in anesthetized cats, and the systolic artery pressure, diastolic artery pressure as well as the heart rate were simultaneously recorded with a physiologic instrument (RM -6000, Japan). The sample of blood plasma (1 mL) was collected in different time interval. The samples were then pretreated with NaOH and ether. A reversed phase HPLC method was developed to determine the concentration of Iso in cat plasma. **RESULTS** A marked hypotensive effect and negative frequency action of Iso were observed. The efficacy and duration of the fresh preparation of Iso were higher than that of the dated preparation of Iso. **CONCLUSION** The relationships of dose-effect and concentration-effect of Iso were positively correlated. Iso was unstable in the solution, the cardiovascular effects would be decreased if the solution of Iso was placed under room temperature for one week.

Key words [isorhynchophylline](#) [pharmacodynamics](#) [dose-response relationship](#)

DOI:

通讯作者 石京山 jsshi@zmc.gz.cn

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(321KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ 本刊中 [包含“异钩藤碱”的相关文章](#)
- ▶ [本文作者相关文章](#)

- [余俊先](#)
- [吴芹](#)
- [谢笑龙](#)
- [黄燮南](#)
- [孙安盛](#)
- [石京山](#)