

简报

青蒿琥酯对孕体组织的损伤

娄小娥^{1*}, 周慧君¹, 黄泓忭²

(1. 浙江大学药学院药理学研究室, 浙江 杭州 310031; 2. 杭州中美华东制药股份有限公司, 浙江 杭州 310011)

收稿日期 2000-11-13 修回日期 网络版发布日期 2009-3-16 接受日期 2001-2-28

摘要 为了探讨青蒿琥酯(Art)对胚胎发育的影响, 作者观察了Art对体外培养人蜕膜细胞存活率的影响, 并选用SD大鼠用DTNB直接法和TBA法测定胚胎和胎盘组织中谷胱甘肽过氧化物酶(GSH-Px)的活性及脂质过氧化产物丙二醛(MDA)含量. 结果表明, 二氢青蒿素对体外培养的人蜕膜细胞有直接杀伤作用, 其 LC_{50} 为 $(25.2 \pm 3.5) \text{mg} \cdot \text{L}^{-1}$. 大鼠于妊娠d 6~10 sc Art, 末次给药后24 h, 胚胎中GSH-Px活性显著降低, MDA含量显著升高($P < 0.05$), 并使胎盘中GSH-Px活性非常显著升高($P < 0.01$). 结果提示, Art能直接损伤蜕膜, 破坏胚胎和胎盘的抗氧化系统的平衡状态, 造成胚胎和胎盘组织的氧化损伤, 最终导致胚胎吸收.

关键词 [青蒿琥酯](#) [谷胱甘肽过氧化物酶](#) [过氧化物脂质类](#) [丙二醛](#) [蜕膜](#)

分类号 [R965.3](#)

Artesunate damaging embryo and placenta

LOU Xiao-E^{1*}, ZHOU Hui-Jun¹, HUANG Hong-Bian²

(1. Department of Pharmacology, Pharmacy College, Zhejiang University, Hangzhou 310031, China; 2. Hangzhou SinoAmerica Huadong Pharmaceutical Co. LTD, Hangzhou 310031, China)

Abstract

To explore the effect of artesunate on the embryo development, we used the decidual cell culture technique to investigate the damage of decidua induced by artesunate and studied the changes in glutathione peroxidase(GSH-Px) activity and malondialdehyde (MDA) content of rat's embryos and placenta by using DTNB direct method and TBA method. Results demonstrated that cultured human decidual cells were damaged when exposed to dihydroartemisinin, the unique active metabolite of artesunate *in vivo*, for 48 h. LC_{50} was $(25.2 \pm 3.5) \text{mg} \cdot \text{L}^{-1}$. Meanwhile, the artesunate given sc in rats on d 6-10 of gestation, GSH-Px activity in embryos was decreased significantly while MDA content was significantly higher than the control group($P < 0.05$) 24 h after the last injection. The GSH-Px activity in placenta was obviously higher than those in the control group. The results suggest that the artesunate damage the decidual cells directly and induce developmental toxicity through derangement of the antioxidant defense mechanism in rat embryos and placenta.

Key words [artesunate](#) [glutathione peroxidase](#) [lipid peroxides](#) [alondialdehyde](#) [decidua](#)

DOI:

通讯作者 娄小娥 7141@21cn.com

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(264KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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“青蒿琥酯”的相关文章](#)
- ▶ [本文作者相关文章](#)

- [娄小娥](#)
- [周慧君](#)
- [黄泓忭](#)