

论文

延胡索酸酯对吞噬细胞产生超氧阴离子的调节作用

朱可建;岑建萍;林爱华;金纳;程浩

浙江大学 医学院 附属邵逸夫医院 皮肤科, 浙江 杭州 310016

摘要:

关键词: 延胡索酸酯 地塞米松 单核细胞 中性粒细胞 超氧阴离子

Modulatory effect of fumaric acid esters on superoxide-anion generation in human phagocytes

ZHU Ke-jian; CEN Jian-ping; LIN Ai-hua; JIN Na; CHENG Hao

Abstract:

Fumaric acid esters (FAE), mainly dimethylfumarate (DMF), have been shown to be highly efficacious in the treatment of psoriasis. Among the potential side effects of FAE therapy, lymphocytopenia is sometimes observed. In order to address the question whether FAE may interfere with systems of the innate defense, the modulatory role of FAE on the generation of superoxide-anion by human monocytes and neutrophils was studied by measuring the reduction of cytochrome c. Various concentrations of DMF and its metabolite methylhydrogenfumarate (MHF) were used to observe their modulatory effect on superoxide-anion generation by monocytes and neutrophils in response to bacteria (*S.aureus* and *E.coli*) and candida (*C.albicans*). Dexamethasone (DXM, 1×10^{-7} mol·L⁻¹) was also studied at the same time. We found that DXM significantly inhibited superoxide-anion generation from monocytes in response to bacteria and *C.albicans*, whereas DMF and MHF ($10-20 \mu\text{g}\cdot\text{mL}^{-1}$) significantly increased the production of superoxide-anion in monocytes in response to the above mentioned bacteria. DXM, DMF and MHF did not affect superoxide-anion generation of neutrophils. Our data indicate that DMF and MHF enhance superoxide-anion generation in human monocytes as one of the important mechanisms of innate defense against microorganisms.

Keywords: dexamethasone monocyte neutrophil superoxide-anion generation fumaric acid esters

收稿日期 2007-02-27 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者: 程浩

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(111KB)
- ▶ [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

- ▶ 延胡索酸酯
- ▶ 地塞米松
- ▶ 单核细胞
- ▶ 中性粒细胞
- ▶ 超氧阴离子

本文作者相关文章

- ▶ 朱可建
- ▶ 岑建萍
- ▶ 林爱华
- ▶ 金纳
- ▶ 程浩

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"/> 1344