

论文

白芍总苷对胶原性关节炎大鼠滑膜细胞的作用及机制

朱蕾;魏伟;郑咏秋

安徽医科大学 临床药理研究所, 安徽 合肥 230032

摘要:

目的研究白芍总苷(TGP)对胶原性关节炎(CIA)大鼠滑膜细胞的作用及机制。方法采用鸡II型胶原诱导大鼠CIA模型, 胶原酶和胰蛋白酶消化法分离培养大鼠滑膜细胞, 透射电镜观察滑膜细胞超微结构的变化, MTT法检测滑膜细胞的增殖能力, 滑膜细胞培养上清液中IL-1活性的测定采用小鼠胸腺细胞增殖法, TNF α 和PGE₂含量的测定采用放射免疫测定法。结果TGP能有效改善CIA大鼠滑膜细胞超微结构的变化, 抑制其过度的增殖反应和产生IL-1, TNF α 和PGE₂的水平。结论TGP对CIA大鼠功能亢进的滑膜细胞具有明显的抑制作用, 其作用机制可能与其抑制滑膜细胞的过度增殖和分泌能力有关。

关键词: 白芍总苷 胶原性关节炎 滑膜细胞 超微结构

Effect and mechanism of action of total glucosides of paeony on synoviocytes from rats with collagen-induced arthritis

ZHU Lei; WEI Wei; ZHENG Yong-qiu

Abstract:

AimTo study the effect and mechanism of action of total glucosides of paeony (TGP) on synoviocytes from rats with collagen-induced arthritis (CIA). MethodsChicken type II collagen was used to induce CIA in rats. Synoviocytes were separated by incubation with collagenase and trypsin, and its ultrastructural changes were observed under transmission electron microscope. Synoviocyte proliferation was determined by 3-(4,5-dimethylthiazal-2yl) 2,5- diphenyltetrazoliumbromide (MTT) assay, and IL-1 activity in synoviocytes supernatant was measured by thymocyte proliferation assay. TNF α and PGE₂ produced by synoviocytes were determined by radioimmunoassay. ResultsTGP was shown to protect CIA rats against the ultrastructural damages of synoviocytes. Meanwhile, TGP also suppressed the excessive synoviocyte proliferation and over-production of IL-1, TNF α and PGE₂. ConclusionTGP has inhibitory effect on hyperfunctional synoviocytes of CIA rats and its mechanism of action may be related with the inhibition of abnormal proliferation and secretion of synoviocytes.

Keywords: collagen-induced arthritis synoviocyte ultrastructure total glucosides of paeony

收稿日期 2005-04-01 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者: 魏伟

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(609KB)
- [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

- 白芍总苷
- 胶原性关节炎
- 滑膜细胞
- 超微结构

本文作者相关文章

- 朱蕾
- 魏伟
- 郑咏秋

PubMed

- Article by
- Article by
- Article by

| | | | |
|-------------|----------------------|------|----------------------|
| 反 馈 人 | <input type="text"/> | 邮箱地址 | <input type="text"/> |
|-------------|----------------------|------|----------------------|

反馈
标题

验证码

9296