

论著

甲乙煎对肝纤维化大鼠肝组织MMP2及TGFβ1表达的作用

王卫华, 王兵亮, 郭卫刚, 柴广丽, 贾世复

邯郸市传染病医院, 河北邯郸056002

摘要:

目的观察中药甲乙煎对实验性肝纤维化大鼠基质金属蛋白酶 2 (MMP2) 及转化生长因子 1 (TGFβ1) 表达的作用。方法雄性清洁级Wister大鼠60只, 随机分为正常对照组和肝纤维化模型组, 运用二甲亚硝胺对模型组大鼠诱导肝纤维化。4周后, 将模型组大鼠随机分为模型对照组、甲乙煎高剂量 [22 g/ (kg · d)] 组和低剂量 [5.5 g / (kg · d)] 组。对甲乙煎高、低剂量组大鼠分别给予甲乙煎灌胃, 共治疗4周, 处死全部大鼠。采用免疫组化法检测大鼠肝组织MMP2和TGFβ1的表达。结果经中药甲乙煎高、低剂量治疗后, 甲乙煎高、低剂量组的大鼠肝细胞浆内TGFβ1的阳性表达与模型对照组比较, 显著降低(P<0.05), 其中甲乙煎高剂量组优于低剂量组(P<0.05); 而甲乙煎高、低剂量组MMP2的表达较模型对照组无明显差异(P>0.05)。结论中药甲乙煎能下调实验性肝纤维化大鼠肝组织TGFβ1的表达, 这是其抗肝纤维化的作用机制之一。

关键词: 甲乙煎 肝纤维化 基质金属蛋白酶 2 转化生长因子 1 大鼠 医学 中国传统 中药

The MMP2 and TGFβ1 expression changes of rat liver fibrosis tissue influenced by Jiayijian

WANG Wei hua, WANG Bing liang ,GUO Wei gang, CHAI Guang li, JIA Shi fu

Handan Infectious Diseases Hospital , Handan 056002, China

Abstract:

ObjectiveTo observe the effects of a traditional Chinese medicine Jiayijian on the matrix metalloproteinase 2 (MMP2) and transforming growth factor beta1 (TGFβ1) expression in experimental hepatic fibrosis rats.MethodsSixty male Wister rats were randomly divided into normal control group and liver fibrosis model group. Dimethylnitrosamine(DMN) was administered to induce liver fibrosis in the model group, and rats in model group were randomly divided into model control group and Jiayijian treatment groups with high concentration (22g/ [kg · d])and low concentration (5.5g/ [kg · d]) 4 weeks after liver fibrosis had been induced. All rats were killed after 4 weeks intragastric administration of Jiayijian. The expression of MMP2 and TGFβ1 of rat liver tissue were detected by immunohistochemical method.ResultsThe expression of TGFβ1 in high and low concentrations of Jiayijian treatment groups was significantly lower than that in the model control group (P<0.05), and the expression of TGFβ1 in the high concentration of Jiayijian treatment group was significantly lower than the low concentration of Jiayijian treatment group (P<0.05), but there was no significant difference in the expression of MMP2 between high and low concentrations of Jiayijian treatment groups and the model control group (P>0.05).ConclusionJiayijian can down regulate the expression of TGFβ1 of experimental hepatic fibrosis model rat' s liver tissue, which is the one of the mechanisms of anti liver fibrosis.

Keywords: Jiayijian liver fibrosis matrix metalloproteinase 2 transforming growth factor 1;rat;medicine, Chinese traditional traditional Chinese medicine

收稿日期 2010-09-01 修回日期 2010-11-23 网络版发布日期 2011-01-31

DOI:

基金项目:

邯郸市科学技术研究与发展计划项目 (0923108133)

通讯作者: 王卫华

作者简介: 王卫华 (1972-), 男(汉族), 河北省邯郸市人,主治医师, 主要从事肝病学研究。

作者Email: wangweiuhhd@sina.com

参考文献:

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(1417KB)
- ▶ [HTML全文]
- ▶ 参考文献PDF
- ▶ 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

- ▶ 甲乙煎
- ▶ 肝纤维化
- ▶ 基质金属蛋白酶 2
- ▶ 转化生长因子 1
- ▶ 大鼠
- ▶ 医学
- ▶ 中国传统
- ▶ 中药

本文作者相关文章

PubMed

- [1] 夏启荣, 何峰. 肝硬化的诊断和治疗 [M]. 北京: 人民卫生出版社, 2002: 11-12.
- [2] 张斌, 万谟彬, 王灵台. 肝纤维化大鼠TGF β 1与TIMP-1mRNA的表达及补肾柔肝方的治疗作用 [J]. 中西医结合学报, 2004, 2 (4): 274-277.
- [3] 贺宇彤, 刘殿武, 丁里玉. 抗纤 I 号和硒对肝纤维化大鼠免疫功能的调节作用 [J]. 中国中医基础医学杂志, 2004, 10 (3): 40-43.
- [4] 严茂祥, 陈芝芸, 项伯康. 中药肝力克对实验性大鼠肝纤维化的影响 [J]. 浙江中医学院学报, 2003, 27 (5): 55.
- [5] Brunt E M. Grading and staging the histopathological lesions of chronic hepatitis: the Knodell histology activity index and beyond [J]. Hepatology, 2000, 31 (1): 241-246.
- [6] 姚乃礼, 白宇宇. 中药抗肝纤维化的研究现状与对策 [J]. 山西中医, 2004, 20 (6): 20-23.

本刊中的类似文章

1. 刘猛¹, 郑煜煌¹, 周华英¹, 何艳¹, 袁宏丽¹, 刘纯¹, 谌资¹, 李瑛², 周国强², 李谨¹. 复方黄芪颗粒治疗 HIV 感染者 24 周的疗效和安全性评价 [J]. 中国感染控制杂志, 2009, 8(1): 21-24