



您是第: 位访问者

欢:

搜索

在线办公

作者登录

审稿登录

编辑登录

读者登录

期刊论坛

主管

中国人民解放军总医院

100853, 北京市复兴路28号

主办

中国人民解放军总医院老年心血管病研究所

编辑

中华老年多器官疾病杂志编辑委员会

100853, 北京市复兴路28号

电话: 010-66936756, 010-

59790736

传真: 66936756

E-mail: zhindqg@mode301.cn

总编辑

王士雯

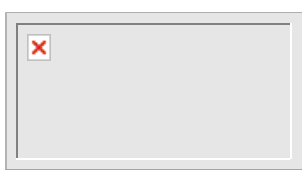
编辑部主任

王雪萍

编辑部常务副主任

黄敏(兼)

友情链接



吴 晖*, 谢红梅, 刘江奎, 罗 俊, 黄泽俊, 李江宁. 急性胰腺炎时胰腺诱导型一氧化氮合酶及瘦素与肠壁通透性的关系及大黄素对其的影响[J]. 中华老年多器官疾病杂志, 2012, 11(2): 138-141

急性胰腺炎时胰腺诱导型一氧化氮合酶及瘦素与肠壁通透性的关系及大黄素对其的影响

Relationship of pancreatic inducible nitric oxide synthase expression and serum leptin with intestinal permeability and effect of emodin on it in rats with acute pancreatitis

DOI:

中文关键词: 急性胰腺炎; 瘦素; 一氧化氮合酶; 肠壁通透性; 大黄素

英文关键词: acute pancreatitis; leptin; nitric oxide synthase; intestinal permeability; emodin

基金项目:

作者

单位

E-mail

吴 晖*, 谢红梅, 刘江奎, 罗 俊, 黄泽俊, 李江宁

华北石油总医院消化科, 任丘 062552

wuuhui@126.com

摘要点击次数: 27

全文下载次数: 22

中文摘要:

目的 探讨大黄素在急性胰腺炎(AP)时对胰腺诱导型一氧化氮合酶(iNOS)和血清瘦素表达,以及对肠壁通透性的影响及作用机制。方法 60只成年SD大鼠随机分为AP组(n=20),假手术组(n=20),和大黄素组(n=20)。检测血清淀粉酶活性、血清瘦素含量、胰腺组织中iNOS及NO含量、肠黏膜通透性(以血液与肠内125I-清蛋白累积指数表示),并对胰腺和回肠进行病理学检查。结果 AP组和大黄素组血清淀粉酶活性、瘦素含量、胰腺组织内的NO和iNOS水平及125I-清蛋白累积指数均显著高于假手术组(P<0.05);与AP组比较,大黄素组血清淀粉酶活性、胰腺组织内的NO、iNOS水平及125I-清蛋白累积指数均显著下降(P<0.05),血中瘦素含量明显升高(P<0.05),同时胰腺及回肠病理损害明显减轻。结论 AP肠壁通透性增加的原因之一可能与AP时胰腺iNOS的过度表达产生过多NO有关,大黄素可降低胰腺iNOS的表达,该作用可能与升高血清瘦素水平有关,大黄素对降低AP时肠壁通透性的增加有一定预防和治疗作用。

英文摘要:

Objective To investigate the effects of emodin on inducible nitric oxide synthase (iNOS) expression of pancreatic tissue, serum leptin and intestinal permeability in rats with acute pancreatitis(AP) and the relative mechanism. Methods Sixty adult SD rats were randomly divided into three groups: sham operation group, AP group, and emodin treatment group, with 20 in each group. The expressions of iNOS and NO in pancreatic tissue were measured. Blood amylase(AMY) and serum content of leptin were detected. Intestinal permeability was measured by albumin clearance(AC) of 125I-labeled rat serum albumin. The histopathologic changes of pancreas and ileum were observed. Results The blood AMY, plasma content of leptin, cumulative 125I-labeled serum albumin index and the levels of iNOS and NO in pancreatic tissue were significantly higher in AP group and emodin treatment group than in sham operation group(P<0.05). Compared with AP group, in emodin treatment group, the levels of iNOS and NO in pancreatic tissue, the blood AMY and cumulative 125I-labeled serum albumin index were significantly decreased(P<0.05); the serum content of leptin was increased; the pathological changes of pancreas and ileum were significantly alleviated(P<0.05). Conclusion The increase of intestinal permeability in rats with AP may be induced by overexpression of NO via action of iNOS. Emodin is effective in the increase of the serum leptin and the decrease of iNOS. Emodin has certain preventive and therapeutic effects on bowel wall permeability decrease in AP rats.

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

关闭