

论文

非酒精性脂肪肝小鼠肝组织PPAR α 和UCP-2表达

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摘要:

目的 探讨过氧化物酶增殖活化受体 α (PPAR α)和解偶联蛋白2(UCP-2)在非酒精性脂肪肝病(NAFLD)小鼠肝组织中的表达。**方法** 雄性成年ICR小鼠30只随机分成3组,每组10只,即对照组(普通饲料)、模型A组(普通饲料4周+高脂饲料4周)、模型B组(高脂饲料8周),分别测定肝脏指数并制作肝脏病理切片,采用反转录-聚合酶链反应(RT-PCR)方法,测定小鼠肝组织中PPAR α 和UCP-2 mRNA表达。**结果** 对照组、模型A、B组小鼠肝指数分别为(3.89 \pm 0.87)%、(7.42 \pm 0.95)%、(9.38 \pm 1.07)%,模型组小鼠肝指数均高于对照组($P<0.01$),模型小鼠肝脏脂肪变性明显;模型A、B组小鼠肝组织中PPAR α mRNA表达量分别为(0.63 \pm 0.33)、(0.45 \pm 0.19),低于对照组的(1.16 \pm 0.27)($P<0.01$),模型A、B组小鼠肝组织中UCP-2 mRNA表达量分别为(0.67 \pm 0.76)、(0.89 \pm 0.52),高于对照组的(0.25 \pm 0.13)($P<0.01$)。**结论** 发生NAFLD的小鼠肝组织中PPAR α 和UCP-2 mRNA表达异常。

关键词: 非酒精性脂肪肝病(NAFLD) 过氧化物酶增殖活化受体 α (PPAR α) 解偶联蛋白2(UCP-2) 反转录-聚合酶链反应(RF-PCR)

Expressions of PPAR α and UCP-2 mRNA in hepatic tissue in NAFLD mice

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Abstract:

Objective To explore the expressions of peroxisome proliferator-activated receptor α (PPAR α)and uncoupling proteins 2(UCP-2)in hepatic tissue in the mice with non-alcoholic fatty liver disease (NAFLD).**Methods** Thirty mature male ICR mice were randomly divided into three groups(10 in each group).The mice in control group were fed with normal diet;the mice in experimental group A were fed with normal diet for 4 weeks;and then with high-fat diet for 4 weeks;and the mice in experimental group B were fed with high-fat diet for 8 weeks.Liver index were measured.The expressions of PPAR α and UCP-2 mRNA in hepatic tissue were examined with reverse transcription polymerase chain reaction(RT-PCR).**Results** The liver index for the mice in control group,experimental group A and experimental group B were 3.89 \pm 0.87,7.42 \pm 0.95,and 9.38 \pm 1.07,respectively.In the mice of experimental group,the liver index was significantly higher than that of the control mice($P<0.01$).The steatosis of hepatic tissue in experimental group was obvious.PPAR α mRNA expressions in hepatic tissue of mice of experimental group A(0.63 \pm 0.33)and experimental group B(0.45 \pm 0.19)were dramatically decreased compared to normal group(1.16 \pm 0.27)($P<0.01$).UCP-2 mRNA expressions in hepatic tissue of mice of experimental group A(0.67 \pm 0.76)and experimental group B(0.89 \pm 0.52)were dramatically increased compared to normal group(0.25 \pm 0.13)($P<0.01$).**Conclusion** The expression of PPAR α and UCP-2 in hepatic tissue of NAFLD mice are abnormal.

Keywords: NAFLD PPAR α UCP-2 RT-PCR

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