

论著

乙型肝炎病毒1653T变异与肝癌相关性研究

刘悦晖1, 丁静娟2

1邵阳市中心医院, 湖南邵阳422000; 2 贵阳医学院, 贵州贵阳550004

摘要:

目的研究乙型肝炎病毒(HBV)1653T变异与肝癌的相关性。方法收集HBV感染者血清119份(HBV DNA均阳性,其中 HBV携带24份,慢性乙型肝炎35份,乙型肝炎肝硬化29份,原发性肝癌31份),采用半巢式聚合酶链反应扩增HBV前C及C基因部分片段,产物纯化后直接测序,检测1653T变异;用S基因PCR-RFLP方法确定HBV基因型。结果24份HBV携带者标本未检出1653T变异;35份慢性乙型肝炎患者标本中检出1份(2.86%)1653T变异;29份乙型肝炎肝硬化患者标本中检出5份(17.24%)1653T变异,与慢性乙型肝炎患者比较,差异无统计学意义( $\chi^2=2.36, P>0.05$ );31份原发性肝癌患者标本中检出14份(45.16%)1653T变异,与乙型肝炎肝硬化患者比较,差异有统计学意义( $\chi^2=5.40, P<0.05$ )。119份血清标本中有10份未能成功定型;余51份B基因型标本中检出2份1653T变异,58份C基因型标本中检出18份1653T变异,两者比较,差异有统计学意义( $\chi^2=11.57, P<0.01$ )。结论HBV 1653T变异与原发肝癌关系密切,更易发生在C基因型;可作为预测原发肝癌的指标。

关键词: 肝炎病毒,乙型; 肝炎 乙型; 肝肿瘤; 原发性肝癌; 1653T变异; 基因型

The relationship between hepatitis B virus mutation at nucleotides 1653T and liver cancer

LIU Yue hui1, DING Jing juan2

1Shaoyang Central Hospital, Shaoyang 422000, China; 2 Guiyang Medical College, Guiyang 550004, China

Abstract:

Objective To study the relationship between hepatitis B virus (HBV) mutation at nucleotides 1653T and liver cancer. Methods One hundred and nineteen serum samples of HBV infected patients were collected (All were positive HBV DNA), 24, 35, 29, and 31 samples were from asymptomatic carriers (ASC), patients with chronic hepatitis B (CHB), liver cirrhosis (LC), and hepatocellular carcinoma (HCC), respectively. Partial fragments of HBV pre C and C gene were amplified by semi-nested polymerase chain reaction. The PCR products were subjected to direct sequencing and the mutation at 1653T was determined by sequence analysis. HBV genotypes were detected by restriction fragment length polymorphism based on S gene PCR products. Results All samples from 24 ASC were not found mutation at nucleotides 1653T; 1 (2.86%) sample from 35 CHB and 5 (17.24%) from 29 LC were found mutation at 1653T; The detection rate of 1653T mutation was not significantly different between CHB and LC ( $\chi^2=2.36, P>0.05$ ); 14 (45.16%) samples were found mutation at 1653T in HCC, the mutation at 1653T in HCC was significantly higher than that of LC ( $\chi^2=5.40, P<0.05$ ). Of 119 serum samples of HBV, 2 of 51 genotype B and 18 of 58 genotype C were detected mutation at nucleotides 1653T, the other 10 samples couldn't be determined genotype. The difference in mutation at 1653T between genotype C and B was significant ( $\chi^2=11.57, P<0.01$ ). Conclusion HBV 1653T mutation is correlated with HCC, and is more prone to occur in genotype C infection; 1653T mutation can be as predictive risk factors for hepatocarcinogenesis.

Keywords: hepatitis B virus hepatitis B liver tumor hepatocellular carcinoma ;1653T mutation; genotype

收稿日期 2010-03-28 修回日期 2010-06-22 网络版发布日期 2011-07-30

DOI:

基金项目:

通讯作者: 刘悦晖

作者简介: 刘悦晖(1975-),男(苗族),湖南省邵阳市人,主治医师,主要从事病毒性肝炎分析生物学研究。

作者Email: hui75116@126.com

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(867KB)
- ▶ [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

- ▶ 肝炎病毒,乙型; 肝炎乙型; 肝肿瘤; 原发性肝癌; 1653T变异; 基因型

本文作者相关文章

PubMed

#### 参考文献:

- [1] 刘悦晖, 丁静娟, 张权. 慢性乙型肝炎病毒感染者病毒前C 区和基本核心启动子区变异检测及意义 [J] . 中华消化杂志,2005,25(9):529-533.
- [2] 彭亮,丁静娟,张莉莎. 乙型肝炎病毒S 基因限制性片段长度多态性分型方法的建立及应用 [J] . 中华肝脏病杂志,2004,12 (8) :475-478.
- [3] Shinkai N, Tanaka Y, Ito K,et al. Influence of hepatitis B virus X and core promoter mutations on hepatocellular carcinoma among patients infected with subgenotype C2 [J] . J Clin Microbiol,2007,45 (10):3191-3197.
- [4] Wang Z, Tanaka Y, Huang Y,et al. Clinical and virological characteristics of hepatitis B virus subgenotypes Ba, C1, and C2 in China [J] . J Clin Microbiol,2007,45(5):1491-1496.
- [5] Terradillos O, Billet O, Renard C A, et al. The hepatitis B virus X gene potentiates c myc induced liver oncogenesis in transgenic mice [J] . Oncogene ,1997,14(4):395-404.
- [6] Buckwold V E, Xu Z C, Chen M, et al. Effects of a naturally occurring mutation in the hepatitis B virus basal core promoter on precore gene expression and viral replication [J] . J Virol,1996,70(9):5845-5851.
- [7] Chan H L, Hui A Y, Wong M L, et al. Genotype C hepatitis B virus infection is associated with an increased risk of hepatocellular carcinoma [J] .Gut,2004,53(10):1494-1498.

#### 本刊中的类似文章

1. 何纲, 丁佩佩.HIV合并HCV和/或HBV感染者的死亡原因分析 FREE[J]. 中国感染控制杂志, 2010,9(3): 179-181
2. 邹艳波, 蒋冬梅, 曾烂漫.某三甲医院门诊就诊男性乙型肝炎病毒携带者饮酒行为调查[J]. 中国感染控制杂志, 2011,10(3): 185-190
3. 刘仕莲<sup>1</sup>, 池雷霆<sup>2</sup>, 吴林伯<sup>1</sup>, 姚蓉玲<sup>1</sup>, 黄德全<sup>1</sup>, 彭双林<sup>1</sup>.受血者受血前HIV、HBV、 HCV、梅毒感染及其重叠感染研究[J]. 中国感染控制杂志, 2009,8(2): 110-112
4. 文卫红, 龙湘珍, 蒋旭东, 杨小青, 廖文韬.48例静脉药瘾者多重病毒感染临床分析[J]. 中国感染控制杂志, 2009,8(1): 25-26
5. 付汉东, 张爱华, 余小燕, 魏威.HCV、HBV、HIV间合并感染患者血清IL 18、VEGF、TGF β1的含量变化 [J]. 中国感染控制杂志, 2011,10(4): 256-259