肿瘤防治研究 » 2012, Vol. 39 » Issue (09): 1112-1116 DOI: 10.3971/j.issn.1000-8578.2012.09.014

FAT10单核苷酸多态性与肝细胞癌发生发展的关联

袁荣发[1],刘秀霞[2],余新[1],刘天德[1],蔡红平[3],邵江华[1,2]

1.330006 南昌，南昌大学第二附属医院肝胆外科，2.江西省分子医学重点实验室；3.南昌大学医学院流行病学及统计教研室

Relationship between Single Nucleotide Polymorphism of FAT10 Gene and Progression of Hepatocellular Carcinoma

Yuan Rongfa[1],Liu Xiuxia[2] ,Yu Xin [1],Liu Tiande[1],Cai Hongping[3],Shao Jianghua[1,2]

1.Department of Hepatobiliary Surgery,The Second Affiliated Hospital of Nanchang University,Nanchang 330006,China;
2.Jiangxi Provincial Key Laboratory of Molecular Medicine;
3.Department of Epidemiology and Statistics,Medical College of Nanchang University

- 摘要
- 参考文献
- 相关文章

全文: PDF (975 KB) HTML (1 KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要

目的

探讨FAT10基因外显子和侧翼序列单核苷酸多态性（single-nucleotide polymorphism,SNP）与 肝细胞癌发生和临床病理的关系。方法通过DNA测序分析方法，检测254例肝癌和268例健康对照人群的FAT10基因SNPs，并比较不同基因型与肝细胞癌的发生和临床病理的的关系。采用Haploview统计软件分析研究对象的连锁不平衡和单体型。结果在肝癌组和对照组共检测到10个SNPs位点。 其中-143 A/G，-121 A/G，+3476 T/C，+3607 T/C，+3620 C/G和 +3809 G/T基因型与相应的野生型纯合子相比能明显降低肝癌发病的风险（P<0.05），但是这些多态性位点的基因型频率与肝癌的临床表型无关（*P*>0.05）。进一步单体型分析发现，各变异等位基因在病例组和对照组内均存在遗传连锁不平衡现象，AATTTCG、AATCTCG、GGCTCGT和AGCTCGT为四种常见的单体型。GGCTCGT和AGCTCGT单体型可能对肝癌的发病起保护性效应（*OR*=0.41,95%*CI*:0.24~0.70,*P*<0.05 和 *OR*=0.43,95% *CI*:0.22~0.983,*P*<0.05），而AATTTCG单体型可能增加肝癌的发病风险（*OR*=1.64,95% *CI*:1.24~2.17,*P*<0.05）。结论本研究首次发现中国汉族人群FAT10基因外显子和侧翼序列SNPs与肝癌的易感性相关，但需要不同种族的大样本和功能研究进一步验证。

关键词： FAT10基因 单核苷酸多态性 肝细胞癌

Abstract：

Objective

To study the association between single nucleotide polymorphism in exonic and flanking sequence of the human HLA-F adjacent transcript 10(FAT10) gene and susceptibility of hapatocellular carcinoma(HCC).MethodsA total of 522 subjects,including 268 healthy controls and 254 patients with HCC were recruited.Genotyping was done by DNA sequencing.The odds ratios(ORs) and 95% confidence intervals(CIs) were calculated by unconditional logistic regression model to estimate the risk of FAT10 SNPs to development of hepatocellular carcinoma.Haplotypes distribution was estimated by haploview software.ResultsWe identified 10 SNPs in both HCC and healthy subjects.The -143 A/G,-121 A/G,+3476 T/C,+3607 T/C,+3620 C/G and +3809 G/T genotypes were associated with a decreased risk for HCC(all *P*<0.05),but no SNPs were associated with disease clinicopathology(all *P*>0.05).Estimated by haploview software,genetic linkage disequilibrium existed both in the patients and the controls AATTTCG,AATCTCG,GGCTCGT and AGCTCGT were four most common haplotypes.Haplotypes GGCTCGT and AGCTCGT were related to reduced HCC risk(*OR*=0.41,95% *CI*=0.24~0.70,*P*<0.05 and *OR*=0.43,95% *CI*：0.22~0.983,*P*<0.05,respectively),while the haplotype AATTTCG was involved into increased risk(OR=1.64,95% *CI*：1.24~2.17,*P*<0.05).ConclusionThe FAT10 gene SNPs may be involved in the susceptibility of HCC,while further research is required to confirm this hypothesis both in large

服务

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- E-mail Alert
- RSS

作者相关文章

sample size and different ethnicity.

Key words： FAT10 gene Single nucleotide polymorphism Hepatocellular carcinoma

收稿日期: 2011-11-29;

基金资助:

江西省自然科学基金资助项目（2008GZY0059）

通讯作者: 邵江华， E-mail:shao5022@163.com E-mail: shao5022@163.com

作者简介: 袁荣发（1985-），男，硕士，住院医师，主要从事肝癌的基础和临床研究

引用本文:

. FAT10单核苷酸多态性与肝细胞癌发生发展的关联[J]. 肿瘤防治研究, 2012, 39(09): 1112-1116.

. Relationship between Single Nucleotide Polymorphism of FAT10 Gene and Progression of Hepatocellular Carcinoma[J]. Cancer Research on Prevention and Treatment, 2012, 39(09): 1112-1116.

没有本文参考文献

[1] 汪春林，黄盛鑫，程小伟，张 勇. VEGF+936C/T多态性与乳腺癌易感性关系的Meta分析[J]. 肿瘤防治研究, 2013, 40(05): 489-494.

[2] 刘袁君，孔宪炳. 肝细胞癌伴门静脉癌栓的诊治现状及展望[J]. 肿瘤防治研究, 2013, 40(03): 304-307.

[3] 朱静峰，任正兵，顾海勇，马少君，刘超，陈锁成. DICER基因多态性与食管癌淋巴结转移危险因素的关系[J]. 肿瘤防治研究, 2012, 39(7): 822-825.

[4] 刘天德，余新，刘秀霞，袁荣发，蒋成行，邵江华. Rock2对肝癌细胞放疗敏感度的影响[J]. 肿瘤防治研究, 2012, 39(6): 658-661.

[5] 唐丽，张卫红，范宏萍，朱萧. 热休克蛋白A5基因多态性与乙肝病毒侵袭的关系[J]. 肿瘤防治研究, 2012, 39(6): 680-682.

[6] 张兰，李胜棉，张慧景，吴义娟. CD34、8-OHdG和Ki67在HBV相关肝细胞癌组织中的表达及对预后的意义[J]. 肿瘤防治研究, 2012, 39(5): 547-550.

[7] 柏桦，仇小强，刘顺，贝春华，曾小云，余红平. IFN-γ基因多态性与HBV感染及原发性肝细胞癌易感性的研究[J]. 肿瘤防治研究, 2012, 39(3): 329-334.

[8] 赵心恺;宁巧明;孙晓宁;田德安. Pokemon基因在肝癌细胞中的表达及意义[J]. 肿瘤防治研究, 2012, 39(2): 137-139.

[9] 张彤,段仁慧,张蕊. 吉西他滨联合多西紫杉醇方案治疗晚期肝癌的临床观察[J]. 肿瘤防治研究, 2012, 39(11): 1369-1372.

[10] 刘双海，李德春. uPAR 表达对肝癌细胞株SMMC-7721体外及体内侵袭转移能力的影响[J]. 肿瘤防治研究, 2012, 39(10): 1176-1178.

[11] 尹东,孟涛,王琦三,王飞,艾克热木·玉素甫,葛磊,张国庆. IL-1β基因多态性、幽门螺旋杆菌感染及其交互作用与新疆汉族胃癌发生的关系[J]. 肿瘤防治研究, 2012, 39(08): 976-979.

[12] 黄耿文;丁翔. ESM-1作为肝癌血管内皮标志物的意义[J]. 肿瘤防治研究, 2011, 38(9): 1035-1037.

[13] 吴晓慧;王顺祥;杨永江;李建坤. YC-1对人肝细胞癌裸鼠移植瘤的影响及其机制[J]. 肿瘤防治研究, 2011, 38(8): 895-898.

[14] 胡蓉环;刘安文;蔡婧;张树辉. MAP4K4在肝细胞癌中的表达及意义[J]. 肿瘤防治研究, 2011, 38(7): 752-755.

[15] 郭炜;刘盼;董玉然;郭艳丽;杨植彬;邝钢;董稚明. TSP1基因G1678A和A2210G基因多态性与贲门腺癌发病风险的关联[J]. 肿瘤防治研究, 2011, 38(3): 329-332.