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广西扶绥县壮族人群 ESR1 基因SNP与肝癌家系遗传易感性的关系 点此下载全文 点此浏览HTML全文

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摘要：

目的：探讨广西壮族自治区扶绥县肝癌高发地区壮族人群雌激素受体1基因（estrogen receptor1 gene， ESR1）单核苷酸多态性(single nucleotide polymorphism,SNP)与肝癌遗传易感性的关系。方法： 采用病例-对照研究和限制性片段长度聚合酶链反应（PCR-RFLP）方法，对扶绥县21个肝癌高发家系组共85例及同居住地10个正常对照家系组共39例进行 ESR1 基因型分布频率的检测；运用非条件Logistic回归分析基因多态性与肝癌发生危险性的关系，并将实验结果结合临床资料进行统计学分析。 结果：（1）经 ESR1 基因型检测分型，正常对照家系组人群携带AA、AG、GG基因型频率分别为74.36%、17.95%和7.69%；肝癌高发家系组人群携带AA、AG、GG基因型频率分别为83.53%、11.76%和4.71%；（2）基因型在两组人群中的分布符合 Hardy-Weinberg平衡定律；（3）正常对照家系组人群中AG、GG基因型个体罹患肝癌的风险率分别是AA基因型个体的0.218（95% CI =0.025~1□917， P =0.170）和0.509（95% CI =0.049~5.260， P =0.571），肝癌高发家系组人群中非肝癌者AG、GG基因型的个体罹患肝癌的风险率分别是AA基因型个体的0.298（95% CI =0.035~2.515， P =0.233）和0.671（95% CI =0.070~6.391， P =0 729），差异均统计学意义。 结论： 广西扶绥县壮族人群中， ESR1 基因rs3798757位点SNP多态性与罹患肝癌关。

关键词：肝细胞癌 ESR1 基因 单核苷酸多态性 家系 易感性

Relationship between estrogen receptor-1 gene single nucleotide polymorphism and genetic susceptibility in 21 hepatocellular carcinoma families pedigrees of Zhuang population in Fusui County of Guangxi Download Fulltext

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Abstract:

Objective : To investigate the relationship between estrogen receptor 1 gene (ER-1) single nucleotide polymorphism(SNP) and susceptibility to hepatocellular carcinoma (HCC) in liver cancer family pedigrees of Zhuang population in Fusui county of Guangxi. Methods: This was a case-control study involving 85 members of 21 HCC high incidence families and 39 members of 10 normal control families in Fusui County, Guangxi Province. Genotype frequencies and restriction fragment length polymorphisms of the ER-1 gene were determined by PCR. Correlation between the ER-1 gene polymorphisms and HCC risk was evaluated by non-conditional logistic regression analysis. Results: The frequencies of genotypes AA, AG, GG among the normal controls and HCC high incidence families was 74.36 vs 83.53%, 17.95 vs 11.76%, and 7 69 vs 4.71%, respectively. Age and sex distributions did not differ significantly between the two groups (P >0.05) and genotype distributions conformed to Hardy-Weinberg equilibrium. In the normal control families, the risk of HCC for members with AG and GG was 0.218 (95% CI =0.025-1.917, P =0.170) and 0.509 (95% CI =0.049-5.260, P =0.571) times that of members with AA respectively. In the high HCC incidence families, the risk of HCC for members with AG and GG was respectively 0.298 (95% CI =0.035-2.515, P =0.266) and 0.671 (95% CI =0⁻070-6⁻391, P =0.729) times that of members with AA. Conclusion: There is no correlation between ESR1 gene rs3798757 polymorphism and susceptibility to HCC in families with high incidence of liver cancer in Fusui County of Guangxi Province.

Keywords:HCC estrogen receptor1 gene(ESR1) single nucleotide polymorphism pedigree susceptibility

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[1] 丁飞,陈圆圆,谢裕安.广西扶绥县肝癌家系XRCC1基因Arg399Gln多态性与肝细胞癌的遗传易感性[J].中国医学文摘:肿瘤学,2012(1):33-37.

[2] 石秀娥,徐建旺,马佳玲,刘海,贾明峰,刘春霞,席亚明.GSTP1基因多态性与急性髓系白血病易感性的关系[J].临床血液学杂志,2011(1).

[3] 徐建旺,石秀娥,贾明峰,李明,张豪,李蓓,刘春霞,姚小健,马海珍,席亚明.甘肃人群NQO1基因多态性与急性髓系白血病易感性的关系[J].临床血液学杂志,2010(6):718-720.

[4] 孟宪杰,张万江.结核病易感性相关基因-NRAMP1基因的研究进展[J].医学综述,2008,14(23):3588-3589.

[5] 李军改,回天立,李峥,白杨,马国明,孙玉巧,李春晓,耿翠芝.家族性乳腺癌家系成员乳腺癌易感基因突变的研究[J].中华乳腺病杂志(电子版),2012,6(6):631-639.

[6] Du WN,Sun HX,Wang H,Qiang BQ,Yao ZJ,Gu J,Xiong MM,Huang W,Chen Z,Zuo J,Hua XF,Gao W,Sun Q,Fang FD.中国汉族人群Ⅱ型糖尿病家系1号染色体易感基因的精细定位[J].中国医学科学院学报,2002,24(3):234-237.

[7] 王静雯,张灏,周伟,何跃玲,田东,闫永建.CYP 2E1 5\'侧翼区基因多态性与职业性锰中毒易感性病例对照研究[J].预防医学论坛,2007,13(8):673-674.

[8] 陈敏,陈思东,汪保国.GSTM1与肺癌易感性的病例对照研究[J].中国肿瘤,2004,13(11):686-688.

[9] 崔斌,部春迎,付萍.MCP-1基因多态性与食管癌易感性的关系[J].中国肿瘤外科杂志,2014(6):382-384.

[10] 黄雪,唐国都,姜海行,黄杰安,谭至柔,梁志海,周洁,陆云飞.代谢酶基因CYP 1A1与广西胃癌遗传易感性的关系[J].国际消化病杂志,2010,30(5).

[11] 杨靖,杨瑞森,李会庆,温培娥,金世宽.细胞色素P1A1氧化酶基因型与食管癌易感性的研究[J].中国肿瘤临床与康复,2004,11(1):9-11.

[12] 姜维平,沈洪兵,郝超.2型糖尿病核心家系的遗传易感性研究[J].中国慢性病预防与控制,1999,7(6):245-246.

[13] 哈斯图雅,苏秀兰,毕力夫.HLA-DQA1等位基因与疾病易感性研究进展[J].内蒙古医学院学报,2006(Z1).

[14] 杨志国,谢裕安.GSTM1基因多态性与肿瘤遗传易感性研究进展[J].现代肿瘤医学,2009,17(1).

[15] 于兆亚,汤静.hOGG1基因多态性与胃癌遗传易感性的关系[J].中国医药科学,2013(20):27-28,32.

[16] 郝刚跃,许纯孝,张怀强,葛南,孟彦,杨明山.GSTM1基因多态性和膀胱癌遗传易感性的关系[J].中华泌尿外科杂志,2002,23(6):344-346.

[17] 王威,吴拥军,吴逸明.DNA修复基因hOGG1多态与肺癌遗传易感性[J].癌变．畸变．突变,2005,17(2):101-103.

[18] 杜国波,谭榜宪,马代远.CYP2E1基因多态性与肺癌易感性关系的研究进展[J].肿瘤预防与治疗,2010,23(2).
[19] 陶卫平,胡胜,谢忆山,蒋振曼.错配修复基因MLH1突变与散发结肠癌易感性的研究[J].中华实验外科杂志,2009,26(6).
[20] 曹燕飞,陈汉春.GSTP1多态性与肺癌易感性关系的对照研究[J].长治医学院学报,2005,19(2):86-88.