



## 磺酰脲类受体基因多态性与2型糖尿病的相关性研究Study on the Relationship between Gene Polymorphism and Type 2 Diabetes Mellitus

### 摘要 研

研究磺酰脲类受体1 (SUR1) 基因外显子16-3c/t多态性在中国某南方汉族人群中是否为2型糖尿病的反应-限制酶切片长度多态性 (PCR-RFLP) 方法对南方汉族46个2型糖尿病高发家系成员的SUR1基因型频率为: cc型29.3%、ct型50.7%、tt型20%, c等位基因频率为54.7%; 患者组基因型频率为: cc型16.0%, ct型53.8%、tt型24.5%, c等位基因频率为57.1%; 未患病亲属组基因型频率为: cc型28.3%、ct型47.2%、tt型24.5%, 两组间基因型和等位基因的差异经检验无统计学意义 (分别为 $\chi^2=3.224, P=0.199$ ;  $\chi^2=1.250, P=0.264$ )。在南方汉族人群中, 未发现SUR1基因外显子16-3c/t多态性与2型糖尿病存在关联, 该基因座可能不是该人群的致病基

Abstract: To study whether the 3c/t polymorphism of the sulfonylurea receptor 1 (SUR1) gene exon16 in type 2 diabetes mellitus in type 2 diabetes mellitus pedigrees in Han population in south area of China. Polymerase chain reaction (PCR) and restriction fragment length polymorphism (PCR-RFLP) method was used in 46 type 2 diabetes mellitus pedigrees. The polymorphism in SUR1 gene was analyzed by Mantel-Haenszel  $\chi^2$  test. Frequencies of SUR1-3c/t polymorphism had no significant difference between patients and their normal relatives (genotypes  $\chi^2=3.224, P=0.199$ ; frequency of allele  $\chi^2=1.250, P=0.264$ ). In all subjects, type 2 diabetes mellitus pedigrees, SUR1-3c/t genotypes were listed (cc: 29.3%, 30.2%, 28.3%; ct: 50.7%, 53.8%, 47.2%; tt: 20%, 16.0%, 24.5%) and the frequencies of c and t alleles were 54.7%, 57.1% and 51.9% respectively. The frequency of c is lower than Han population in northern China. The SUR1 exon16-3c/t polymorphism is not associated with type 2 diabetes mellitus in the population.