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论著

男性高尿酸血症与亚甲基四氢叶酸还原酶C677T多态性的关系

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摘要 背景与目的： 探索亚甲基四氢叶酸还原酶基因(MTHFR)C677T多态性与男性高尿酸血症是否具有关联。材料与方法： 对91例男性高尿酸血症患者和正常男性对照81人，分别进行肾功能、血脂、血糖检测和测量血压、一般身体指标，用基因芯片法检测研究对象的MTHFR的基因型。 结果： 高尿酸血症组MTHFR的T等位基因的分布频率明显高于对照组(χ2>3.84，P<0.05),T/T组较C/C组BMI、尿酸和甘油三酯水平面明显升高，差异具有统计学意义(t<1.96,P<0.05) 结论： MTHFR基因C677T突变可能与男性高尿酸血症有关。

关键词 高尿酸血症； MTHFR； 多态性

Polymorphisms of Methylenete-trahydrofolate Reductase C677T and Hyperuricemia in Males

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Abstract BACKGROUND & AIM: To study the relationship between polymorphisms of methylenetetrahydrofolate reductase C677T and hyperuricemia in males . MATERLALS AND METHODS: A case-control study was conducted with 91 males with hyperuricemia and 81 males as control. Anthropometric, blood pressure and biochemical variables, including serum lipids, glucose,serum uric acid, creatinine and urea nitrogen were measured. MTHFR genotypes were detected by DNA microarray technology. RESULTS: The frequency of MTHFR T allele among the cases(50.5%) was significantly higher than the controls(38.8%)(P=0.028),the odds ratios for hyperuricemia was 1.615. Uric acid , triglyceride concentrations and body mass index were markedly higher in subjects with TT genotype than in subjects with CC genotype(P<0.05), homozygotes for the MTHFR mutation had a significantly higher mean uric acid level (458.69±128.51 μmol/L)than those without mutation(392.77±118.90 μmol/L,P<0.05), whereas heterozygotes had an intermediate value (411.28±118.34 μmol/L). CONCLUSION: MTHFR C677T mutation may be considered a risk factor for hyperuricemia in Chinese males.

Keywords hyperuricemia MTHFR polymorphisms

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