

研究报告

偏执型精神分裂症与4个涉及多巴胺代谢的基因之间的关联分析

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摘要

精神分裂症是由多基因相互作用导致的复杂疾病。对其易感基因, 儿茶酚氧位甲基转移酶基因 (COMT) 的众多报道充满了矛盾。在对偏执型精神分裂症研究中, 我们用多基因座关联分析法研究了4个涉及神经递质多巴胺代谢的基因之间的相互作用。分析结果支持如下假说: COMT-136-Bcl I对Val^{108/158}Met有调控作用。当前者的基因型是CC时, 后者的易感等位基因型是Met (A); 而当前者的基因型是GG时, 后者的易感等位基因型是Val (G)。这一新的假说可以解释此前单基因座分析对Val^{108/158}Met (COMT) 的截然相反的报道, 同时也显示了多基因座分析对复杂疾病研究的必要性。

关键词 [偏执型精神分裂症](#) [儿茶酚氧位甲基转移酶基因](#) [多基因座关联分析](#)

分类号

An Association Study between Paranoid Schizophrenia and Four Genes Involved in Dopamine Metabolism

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Abstract

Schizophrenia is a complex disease caused by interactions among multiple genes. Reports of one of its susceptibility genes, *COMT* have been conflicting. In the present study on paranoid schizophrenia, we have performed a multilocus association study to analyze the interactions among 4 genes that are involved in dopamine metabolism. Result supports the hypothesis that *COMT*-136-*Bcl I* regulates *Val*^{108/158}*Met*. When the genotype of the former is *CC*, *Met* (*A*) is the genotype of susceptibility allele *Val*^{108/158}*Met*; and when the genotype of the former is *GG*, *Val* (*G*) is the genotype of susceptibility allele *Val*^{108/158}*Met*. This new hypothesis may explain the conflicting results about *Val*^{108/158}*Met* (*COMT*) obtained by single-locus analyses. It also illustrates that multilocus analysis is necessary for the research of complex diseases.

Key words [paranoid schizophrenia](#); [catechol-O-methyltransferase](#); [multilocus association study](#)

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