

综述

## 5-羟色胺递质相关基因多态性对抗精神病药物作用影响的研究进展

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**摘要** 神经递质5-羟色胺(5-HT)是许多抗精神病药物体内效应环节。5-HT相关基因合成酶色氨酸羟化酶、5-HT转运体、5-HT受体及5-HT效应相关G蛋白耦接受体中的一些高频变异基因型具有5-HT能抗精神病药物疗效优势,有的表现为基因型特异的安全反应性。它们从一个侧面反映了遗传因素对抗精神病药物作用的影响。与此同时,由于同类研究源于不同种族人群,涉及疾病病因与药物疗效评价复杂性,以及研究中的基因型分组方法可能隐含未知遗传异质性的影响等原因,关于特定多态变异对药物作用影响同类研究结果有时存在较大差异。探讨这些问题有利于抗精神病药物遗传药理学研究的发展,提高抗精神病药物的疗效与安全性。

**关键词** [血清素; 多态性,单核苷酸; 遗传药理学](#) [抗精神病药](#)

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## Progress of research on influence of 5-hydroxytryptamine related gene polymorphisms on therapeutic response of antipsychotic drugs

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### Abstract

5-Hydroxytryptamine (serotonin) is one of the most important central neurotransmitters that are also the modulation points of many psychotropic drugs. 5-Hydroxytryptamine related genes, including tryptophan hydroxylase, 5-serotonin transporter, 5-serotonin receptor and G-protein coupled-receptor, have polymorphisms among various populations. Considerable clinical trials have shown that some polymorphisms significantly influenced the efficacy of 5-hydroxytryptamine related antipsychotic drugs. Some genotypes display better therapeutic efficacy, while some display more favorable adverse reaction and good tolerance. Such information implicates the hereditary rule of the clinical response of corresponding psychotropic drugs, and indicate a way to rationally use psychotropic drugs clinically. Meanwhile, due to the ethnic heterogeneity of volunteers involved, complexity of mental disorder and related drug therapy evaluation, and limitations of genotype methods used in current investigations, results of related research on the impact of a polymorphic gene mutation sometimes vary considerably, reflecting the difficulty facing this sphere of research. Thus, it is more important to point out the direction of development for studies or for pharmacogenetics and finally pave the way for better therapeutic efficacy and security for antipsychotic drugs.

**Key words** [serotonin](#) [polymorphism](#) [single nucleotide](#) [pharmacogenetics](#) [antipsychotic agents](#)

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