

综述

## 炎症过程中细胞色素P450酶活性降低及其机制的研究进展

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收稿日期 2009-4-9 修回日期 网络版发布日期 2010-5-25 接受日期 2009-11-16

**摘要** 机体在感染或炎症状态下, 肝脏细胞色素P450药物代谢酶mRNA表达和蛋白含量显著降低, 酶的催化活性降低。这种变化对人体内药物代谢过程乃至相关药物临床治疗安全性具有显著影响。细胞色素P450异构酶活性降低具有不同的变化过程与模式, 反映细胞色素P450酶系具有多种活性调节机制。现有研究表明, 细胞色素P450酶活性降低主要发生在基因表达环节, 由多种炎症细胞因子介导。阐明炎症对细胞色素P450活性的影响有助于明确细胞色素P450酶活性的调控机制, 对指导临床安全合理用药具有重要意义。

**关键词** [炎症](#) [细胞色素P450酶系统](#) [细胞因子类](#)

**分类号** [Q554](#)

## Progress in down-regulation of cytochrome P450 enzyme activities and mechanisms during inflammation

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### Abstract

In case of infection or inflammation, the mRNA and protein levels of cytochrome P450 enzymes are down-regulated, and their catalysis activities decrease. These changes have important effect on drug metabolism and the safety of clinical strategies. There are different pathways and modes about the down-regulation of cytochrome P450 enzyme activity, which imply that there are some regulation mechanisms of cytochrome P450 enzymes activity. Recent researches suggest the down-regulation mainly happen in gene expression induced by many inflammation mediators. The clarification of the effect of inflammation on the cytochrome P450 enzymes activity is helpful to understand the regulation mechanisms, and it will play an important role in the safety of clinical drugs.

**Key words** [inflammation](#) [cytochrome P450 enzyme system](#) [cytokines](#)

DOI: 10.3867/j.issn.1000-3002.2010.03.015

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