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综述

Keap1-Nrf2-ARE通路与慢性阻塞性肺疾病氧化/抗氧化失衡关系

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摘要

慢性阻塞性肺疾病(chronic obstructive pulmonary disease，COPD)是一种常见病、多发病，表现为不完全可逆的气流受限，氧化/抗氧化失衡是COPD的主要发病机制之一。Kelch 样环氧氯丙烷相关蛋白-1 (Kelch-like epichlorohydrin-associated protein 1，Keap1)-核转录因子红细胞系-2p45(NF-E2)相关因子-2 (nuclear factor erythroid-2p45-related factor 2，Nrf2)-抗氧化反应元件(antioxidant response element，ARE) Keap1-Nrf2-ARE是近年新发现的机体抵抗内外界氧化损伤的防御性转导通路。研究Keap1-Nrf2-ARE转导通路的结构组成、调控下游二相解毒酶基因表达及其与COPD纠正氧化/抗氧化失衡方面有重要意义。

关键词： 慢性阻塞性肺疾病；氧化应激；Keap1-Nrf2-ARE通路；抗氧化

Relation between Nrf2-Keap1-ARE signaling pathway and imbalance of COPD oxidation/anti-oxidation

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Abstract

Chronic obstructive pulmonary disease (COPD) is a kind of common disease, which displays incompletely reversible

Chronic obstructive pulmonary disease (COPD) is a kind of common disease, which displays incompletely reversible airflow limitation. The imbalance of oxidation/anti-oxidation is the one of the major pathogenesis of COPD. Keap1-Kelch-like ECH-associated protein 1-Nrf2 (NF-E2-related factor2)-ARE (antioxidant response element) (Keap1-Nrf2-ARE) is a novel defensive pathway involved in oxidative stress of organism. It is important to explore the molecular structures of Keap1-Nrf2-ARE, the regulatory mechanisms of phase II detoxifying enzyme genes expression and how to the correct the imbalance of the oxidation/anti-oxidation in COPD.

Keywords: chronic obstructive pulmonary disease | oxidative stress | Keap1-Nrf2-ARE pathway | anti-oxidation

全文

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引用

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