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专家述评

高迁移率族蛋白B1的组织损伤效应及其干预途径

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摘要 摘要：高迁移率族蛋白B1（HMGB1）是严重感染所致脓毒症的重要晚期介质, 参与了包括肺脏、肝脏、肠道在内的多器官损害过程。采用HMGB1中和抗体或特异性拮抗剂抑制其分泌（丙酮酸乙酯、α7烟碱乙酰胆碱受体激动剂）或下调其基因表达（正丁酸钠、信号通路抑制剂）的干预方法有助于减轻组织损伤效应, 并可能为严重脓毒症的防治开辟新途径。

关键词 高迁移率族蛋白B1 脓毒症 多器官功能障碍综合征 干预策略

分类号

Advances in High Mobility Group Box-1 Protein Mediated Multiple Organ Dysfunction and Its Potential Interventional Strategies

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Abstract ABSTRACT:High mobility group box-1 protein (HMGB1) has recently been shown as a crucial late mediator of inflammation and sepsis, and is involved in mediating multi-organ functional lesions, including acute lung, liver, and intestine injuries. As a delayed inflammatory cytokine, HMGB1 provides a wider therapeutic time window for clinical intervention. HMGB1 has been proven to be a promising therapeutic target to prevent the development of multiple organ dysfunction syndrome in experimental models of severe sepsis. The pharmacological strategies include neutralization of antibodies or specific HMGB1 antagonists, suppression of HMGB1 secretion (ethyl pyruvate, agonists for α7-nicotinic acetylcholine receptors), and down-regulation of HMGB1 expression (sodium butyrate, signaling inhibitors for Janus kinase/signal transducer and activator of transcription).

Key words high mobility group box-1 protein sepsis multiple organ dysfunction syndrome interventional strategy

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