

综述

线粒体在心肌缺血再灌注损伤中的作用研究进展

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摘要 心肌缺血再灌注损伤(MIRI)的关键环节之一是细胞能量供应缺乏。线粒体作为细胞的能量供应站,与缺血再灌注损伤机制的多个环节密切相关,其功能障碍造成缺血再灌注对心肌细胞的严重损害的同时又能启动保护机制减轻MIRI。目前对线粒体在MIRI中所起作用的研究已深入到分子水平,以线粒体上某些分子如线粒体通透性转换孔和敏感性钾通道等为靶点,探索治疗MIRI的新策略成为近来研究的热点。本文就线粒体与MIRI相关的分子机制和以线粒体为治疗靶点的药物研究等方面做一综述。

关键词 [线粒体](#) [心肌缺血再灌注损伤](#) [治疗靶点](#)

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Progress of role of mitochondria in myocardial ischemic-reperfusion injury

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Abstract

Short supply of cellular energy is one of the critical factors for myocardial ischemia-reperfusion injury (MIRI). As an energy supply center of cells, mitochondria are closely related to ischemia-reperfusion injury. Its dysfunction may cause serious damage to the cardiac cells during ischemia and reperfusion while it can also initiate a protection mechanism to reduce MIRI. So far, the role of mitochondria in MIRI has been developed to a molecular level. Therefore, as a target of therapeutic strategies, some molecules of mitochondria, such as mitochondrial permeability transition pore, mitochondrial ATP-sensitive potassium channels, have become a research focus related to MIRI. In this paper, the relationship between mitochondria and MIRI, as well as the drug research of mitochondria, is reviewed.

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