综述

尿酸肾损伤发病机制及埃他卡林防治尿酸肾损伤的作用靶标

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摘要 目前,肾脏疾病的临床治疗主要是控制血压,抑制肾素血管紧张素系统。而这样也只能延缓而不能抑制肾脏疾病的发展。因此,排除影响肾脏疾病的危险因素和发现新的治疗方法一直是医学研究的主要目标。尿酸是肾脏疾病进展的独立危险因素,通过损伤内皮细胞功能、刺激血管平滑肌细胞的增殖、炎症作用、刺激肾素 血管紧张素系统和环氧合酶系统、诱导产生严重的肾小球血管病变以及诱导高血压和肾小球肥厚等多种途径损伤肾脏。本实验室前期研究表明,埃他卡林以内皮细胞为靶标,通过激活ATP敏感性钾离子通道,改善内皮细胞功能障碍,可对肾脏产生保护作用。该途径有望成为防治尿酸肾脏损伤的新途径。

关键词 尿酸 肾脏 肾脏损伤 埃他卡林

分类号 R972, R96

Mechanisms of renal injury induced by uric acid and target of iptakalim for prevention and treatment

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Abstract

The mainstay of therapy continues to be controlling blood pressure, blocking the renin-angiotensin system. Even with optimal therapy, progression of kidney disease only tends to be retarded, not to be halted. Thus, the identification of novel risk factors and new treatments for kidney disease remain major objects of medical research. Uric acid is an independent risk factor for renal disease and lead to renal injury through multiple pathway including endothelial dysfunction, stimulation of vascular smooth muscle cell proliferation, inflammation, activation of the renin-angiotensin system and cyclooxygenase- 2 system, severe glomerular vascular lesions, hypertension and glomerular hypertrophy. Our previous studies showed that targeting endothelial cells with iptakalim through activation of ATP sensitive potassium channel could prevent endothelial dysfunction and then protected renal injury. It's different from previous treatments and it is a promising pathway to prevent and cure the renal injury induced by uric acid.

Key words uric acid kidney renal injury iptakalim

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