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论文

尿毒清对慢性肾功能衰竭大鼠肾脏纤维化的影响

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摘要：

目的 探讨尿毒清对慢性肾功能衰竭大鼠肾脏纤维化的影响。方法 36只大鼠随机分为3组，正常对照组、手术对照组及尿毒清组。除正常对照组外,余均采用左侧肾脏切除加尾静脉重复注射阿霉素的方法制作慢性肾功能衰竭大鼠模型。术后1周正常对照组和手术对照组每天灌胃同体积生理盐水，尿毒清组给予尿毒清混悬液3g/（kg·d）灌胃,共给药8周。于第4、8周测量24h尿蛋白定量、肾功能，第8周光镜下观察肾脏病理变化，应用免疫组织化学SABC法测定肾组织α-平滑肌肌动蛋白(α-SMA)、胶原Ⅳ（COLIV）的表达。结果 与正常对照组比较,手术对照组24 h尿蛋白、血尿素氮（Bun）、血清肌酐（SCr）明显升高(P＜0.01)，肾组织α-SMA、COLIV的表达较高(P＜0.01)。尿毒清组尿蛋白、Bun、Scr均较手术对照组明显下降,肾组织α-SMA和COLIV的表达低于手术对照组(P＜0.01)。结论 尿毒清可减少蛋白尿的排泄，改善肾功能，抑制肾小管上皮细胞表型转化,延缓肾脏纤维化。

关键词： 肾脏纤维化；尿毒清；α-平滑肌肌动蛋白；胶原Ⅳ

Effects of Niaoduqing on renal fibrosis of chronic renal failure rats

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Abstract:

Objective To observe the effect of the combination of Niaoduqing on renal fibrosis of chronic renal failure rats. Methods A total of 36 rats were allocated into 3 groups: the normal control group, the operation control group and the Niaoduqing group. The normal control group was given physiological saline and the other 2 groups were established by adriamycin and unilateral nephrectomy. The operation group and the normal control group were given normal saline. The Niaoduqing group were given Niaoduqing for 8 weeks. At 4 weeks and 8 weeks， the 24-hour urinary protein excretion and renal function were observed. At 8 weeks there was pathological change of nephridial tissue, and immunohistochemistry was assayed to measure the expressions of α-SMA and collagenIV. Results Higher expressions of α-SMA,COLIV and more severe glomerulosclerosis in the kidney(P＜0.01), as well as more loss of renal function were observed in the operation group than in the normal control group(P＜0.01). Those changes were less severe in the Niaoduqing group than in the operation group(P＜0.01), suggesting Niaoduqing could significantly decrease expressions of α- SMA and COLIV, and also could slow down the loss of renal function. Conclusion Niaoduqing could significantly reduce urinary protein excretion, improve renal function, inhibit epithelial cell phenotypic change of renal tubules, and delay renal fibrosis.

Keywords: Renal fibrosis; Niaoduqing; α-Smooth muscle actin； Collagen Ⅳ

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