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摘要:

目的: 测定富含半胱氨酸的酸性分泌糖蛋白(SPARC)在IgA肾病患者血液、尿液中的浓度,并观察其在肾组织中的分布和表达。**方法:** 采用夹心ELISA法对IgA肾病患者和正常人血清和尿液中SPARC、肿瘤坏死因子- α (TNF- α)、白细胞介素-1 β (IL-1 β)和白细胞介素-6(IL-6)进行定量检测;应用夹心ELISA法检测IL-6处理后的人肾小球系膜细胞(HMC)和人肾小管上皮细胞(HKC)SPARC蛋白的分泌水平;运用免疫组织化学SP法检测SPARC在IgA肾病患者及正常人肾组织中的表达及分布。**结果:** IgA肾病患者血液及尿液SPARC、TNF- α 、IL-1 β 、IL-6的含量均显著高于正常对照组($P < 0.01$ 或 $P < 0.05$); IgA肾病患者尿液SPARC浓度显著高于血液浓度($P < 0.01$)。IL-6(50 $\mu\text{g/ml}$)分别作用HMC、HKC 96 h后,SPARC蛋白的表达量明显高于对照组($P < 0.01$),而且HKC组SPARC蛋白的表达量明显高于HMC组($P < 0.01$)。在正常肾组织中,SPARC在远端小管细胞仅有极微弱表达,在IgA肾病肾组织小管上皮细胞中SPARC蛋白表达较正常肾组织肾小管细胞明显增强。**结论:** IgA肾病时,增多的炎症因子可刺激肾小管细胞产生和分泌SPARC蛋白增加,引起血清SPARC浓度升高,可能起到一种保护性反馈抑制系膜细胞增殖的作用。

关键词: [富含半胱氨酸的酸性分泌糖蛋白](#) [IgA肾病](#) [血液](#) [尿液](#) [肾](#)

Concentrations of secreted protein acidic and rich in cysteine in serum and urine and its expression in kidney tissues of patients with IgA nephropathy [Download Fulltext](#)

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Abstract:

Objective: To investigate the concentrations of secreted protein acidic and rich in cysteine (SPARC) in the serum and urine of patients with IgA nephropathy and its expression in the kidney tissues. **Methods:** The concentrations of SPARC, tumor necrosis factor- α (TNF- α), interleukin 1 β (IL-1 β), and interleukin 6 (IL-6) in the serum and urine were measured with enzyme-linked immunosorbent assay (ELISA). The contents of SPARC protein in the culture medium of human mesangial cell (HMC) and human renal tubular epithelial cell (HKC), which had been treated with IL-6, were determined by ELISA. The expression and distribution of SPARC in IgA nephropathy and normal kidney tissues were observed by immunohistochemistry assay. **Results:** The concentrations of SPARC in serum and urine of IgA nephropathy patients were higher than those of the normal control subjects ($[2.43 \pm 1.22]$ $\mu\text{g/ml}$ vs $[0.69 \pm 0.21]$ $\mu\text{g/ml}$, $[7.73 \pm 2.81]$ $\mu\text{g/ml}$ vs $[1.17 \pm 1.03]$ $\mu\text{g/ml}$, $P < 0.01$). The serum levels of TNF- α , IL-1 β and IL-6 in IgA nephropathy group were significantly higher than those in the control group ($P < 0.05$); the urinary levels of TNF- α and IL-6 in IgA nephropathy group were also higher than those in the controls ($P < 0.01$). SPARC protein secreted by HKC was higher than that by HMC ($P < 0.01$). SPARC was weakly positive in normal distal cortical tubules. SPARC protein expression in tubular epithelial cells of IgA nephropathy patients was obviously higher than that of the normal controls. **Conclusion:** The secretion of SPARC by renal tubular epithelial cells is increased in patients with IgA nephropathy, which results in elevation of serum SPARC and may have a protective feedback inhibitory effect on HMC proliferation.

Keywords: [secreted protein acidic and rich in cysteine](#) [IgA nephropathy](#) [blood](#) [urine](#) [kidney](#)

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