Expression of kidney injury molecule-1 in urine and serum of patients with acute kidney injury and its early diagnosis value of renal failure

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the expression level of Kidney Injury Molecule-1 in urine and serum of Patients with acute kidney injury and its early diagnosis value of renal failure. Methods: Data of 84 patients with acute kidney injury was retrospectively analyzed. These Patients were divided into RF and no-RF group according to occurrence of renal failure. The levels of kidney injury molecule-1 (Kim-1) in urine and serum of two groups were measured by ELISA. The early diagnosis value of Kim-1 in renal failure was evaluated by receiver-operating characteristic curve (ROC curve). Results: Kim-1 level in the urine and blood of RF group were significantly higher than that of the no-RF group (P<0.05), area of Kim-1 in urine under the ROC curve was 0.855 (P=0.000), area of Kim-1 in the blood under the ROC curve was 0.640 (P=0.028). Conclusion: The level of Kim-1 in urine and blood might predict renal failure in patients with acute kidney injury, Kim-1 can be used as a renal failure early diagnostic markers in patients with acute kidney injury.

[KEY WORDS] Acute kidney injury; Kidney injury molecule-1; Renal failure; Diagnose