

급성 신우신염 환자에서 발생한 급성 신부전의 임상적 특징-RIFLE criteria 보정

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Clinical Characteristics of Acute Kidney Injury in Patients with Acute Pyelonephritis-RIFLE Criteria Validation

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Background: The aim of this study is to investigate the incidence and clinical characteristics of acute kidney injury (AKI) based on the RIFLE criteria in acute pyelonephritis.

Methods: From 2007 to 2012, 706 patients were diagnosed with acute pyelonephritis. Of these, we included 690 patients who were followed up until renal recovery or for at least three months. We evaluated the incidence, clinical characteristics, and severity of AKI based on the RIFLE classification.

Results: Of the 690 patients, 164 had acute pyelonephritis-associated AKI. The incidence of AKI was 23.1%; of which, 10.8%, 10.0% and 2.3% were classified as Risk, Injury and Failure, respectively. In comparison with patients in the non-AKI group, the patients in the AKI group were older (65 ± 15 vs 53 ± 18 year, $p=0.01$) and had low albumin level (3.4 ± 0.6 vs 3.8 ± 0.6 mg/dL, $p=0.01$). Length of hospital stay, intensive care unit admission rate and proportion of hypertension were higher in patients with AKI than in those without. In the AKI group, 151 patients had AKI prior to admission, and 9 patients experienced AKI during their hospitalization. Multivariate analysis revealed that age; male gender; hypertension; complicated type of APN; leukocytosis; hypoalbuminemia were independent predictors for AKI in patients with acute pyelonephritis.

Conclusion: The incidence of AKI in patient with acute pyelonephritis is 23.1%. We identified several factors associated with AKI. Recognition of these predictive factors may help reduce the incidence of acute pyelonephritis-associated AKI.

Key Words: 급성 신질환, 급성신우신염
Acute kidney injury, Acute pyelonephritis