



Plenary lecture III : Evaluation of Kidney Function at Emergency Department

時間：2023 年 7 月 8 日(六) 10:20~10:50

會議室：101 會議廳

主持人：紀志賢醫師(成大醫院)、黃建華醫師(臺大醫院)

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課程簡介

Acute kidney injury (AKI), chronic kidney disease (CKD), and decreased estimated glomerular filtration rate (eGFR) are all associated with poor clinical outcomes among emergency department (ED) patients. The effects of different types of renal dysfunction and the degree of eGFR reduction on the clinical outcomes in a real-world ED setting is still unclear. We conducted a retrospective observational study that enrolled adult patients with an eGFR lower than 60 mL/min/1.73m² in our ED, from October 1, 2016, to December 31, 2016. Besides AKI and CKD, patients with unknown baseline renal function before an ED visit were categorized in the undetermined renal dysfunction (URD) category. Among 1495 patients who had eGFR evaluation at ED, this study finally enrolled 441 patients; 22 patients (5.0%) had AKI only, 32 (7.3%) had AKI on CKD, 196 (44.4%) had CKD only, 27 (6.1%) had subclinical kidney injury (those who met neither criteria for AKI nor CKD), and 164 (37.2%) had URD. There was a significant association between eGFR and critical illness defined as the composite outcome of death or intensive care unit (ICU) need, hospitalization, ICU need, death, and renal replacement therapy need. Multivariate logistic regression analysis showed eGFR was an independent predictor of critical illness composite outcome (death or ICU need), hospitalization, and ICU need even after adjustment with AKI or URD. Based on these results, we conclude estimated GFR may be a sufficient predictor of clinical outcomes of ED patients regardless of AKI complication. Considerable ED patients were determined as URD, which might have a significant impact on the ED statistics regarding renal dysfunction.