

말기 신부전 환자에서 modified Charlson Comorbidity Index와 Davies Comorbidity Index의 임상적 유효성 비교

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Validity of Modified Charlson Comorbidity Index and Davies Comorbidity Index on Clinical Outcomes in Incident Hemodialysis and Peritoneal Dialysis

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Background: Comorbidity is a strong predictor of clinical outcomes in patients with end-stage renal disease (ESRD). Modified Charlson Comorbidity Index (CCI) and the Davies score predict mortality in ESRD patients and used widely in clinical practice. In this study, we compare the predictability for all-cause mortality between two comorbidity indexes in incident hemodialysis (HD) and peritoneal dialysis (PD) patients

Methods: A total of 1,452 incident HD patients and 584 PD patients were enrolled from the Clinical Research Center registry for ESRD cohort in Korea. The CCI and Davies score were recorded at the start of dialysis and the influence on all-cause mortality were analyzed.

Results: In HD patients, the correlation between CCI and Davies score was 0.67 ($p < 0.001$). The Receiver Operating Characteristic (ROC) curve showed that the predictive ability for all-cause mortality of CCI (AUC 0.72, 95% CI 0.67-0.77, $p < 0.001$) was superior to that of Davies score (AUC 0.64, 95% CI 0.59-0.69, $p < 0.001$). In PD patients, the correlation between CCI and Davies score was 0.75 ($p < 0.001$). The ROC curve showed that the predictive ability for all-cause mortality of CCI (AUC 0.84, 95% CI 0.79-0.89, $p < 0.001$) was superior to that of Davies score AUC (0.750, 95% CI 0.67-0.83, $p < 0.001$).

Conclusions: Our data demonstrated that both comorbidity indexes had significant predictive power for all-cause mortality in incident HD and PD patients. And, modified CCI was stronger predictor for all-cause mortality than Davies score.

Key Words: 혈액 투석, 복막투석, 말기신부전

Modified charlson comorbidity index, Davies comorbidity index