

복막 투석 환자에서 Charlson Comorbidity Index를 통한 사망률 예측: ICD-10 자료와 의무기록 비교

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Prediction of Mortality in Incident Peritoneal Dialysis Patients using Charlson Comorbidity Index: A Comparison between ICD-10 Database and Medical Records Review

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Purpose : Most of mortality risks in ESRD patients are related to comorbid diseases present at the start of dialysis. The Charlson Comorbidity Index (CCI) was reported a strong predictor of survival in incipient ESRD patients. We studied the validity of the CCI that obtained from comorbidity data from hospital discharged abstract databases according to International Classification of Disease, 10th revision (ICD- 10) to find easy way to get CCI instead of medical records review.

Methods : Incident peritoneal dialysis patients (N=134) were enrolled from 1997 through 2007. We compared CCI scored by ICD- 10 database with CCI scored by medical records review. These CCI scores and patients outcomes were analyzed.

Result : (1) For all patients, mean age was 57.1 ± 14 (range 22- 82). CCI scored by ICD- 10 (I- CCI) and medical records (R- CCI) were 5.3 ± 2.1 (range 2- 11), 5.4 ± 2.1 (range 2- 11), respectively. There was high correlation between I- CCI and R- CCI (R=0.88, p<0.01).

(2) During the study period, 59 patients with peritoneal dialysis died, for an overall mortality rate of 15.5/100 patients- years. Four comorbidity groups were established by quartile ranking: low comorbid (score=2- 3) moderate comorbid (score=4- 5), high comorbid (score=6- 7), very high comorbid (score=8- 11). The mortality rates were; 6.3, 11.3, 22.4 and 22.8/100 patients- years, by I- CCI; 7.0, 8.5, 23.1 and 27.6/100 patients- years, by R- CCI respectively.

Conclusion : The CCI scores from hospital discharged abstract databases according to ICD- 10 predict the mortality significantly. This method is simple and valid to predict the outcomes of incipient PD patients.

Key Words : 복막투석, 동반질환

Peritoneal dialysis, Comorbidity