

복막투석 환자에서 혈청 크레아티닌으로 계산된 사구체 여과율을 이용한 잔여신기능의 예측

영남대학병원 내과학교실 신장내과

강석휘, 조규향, 박종원, 윤경우, 도준영

Predicting Residual Renal Function in Peritoneal Dialysis Patients using an Estimated Glomerular Filtration Rate Based on Serum Creatinine Levels

Seok Hui Kang, Kyu Hyang Cho, Jong Won Park, Kyung Woo Yoon, Jun Young Do

Division of Nephrology, Department of Internal Medicine, Yeungnam University Hospital

Background: Estimated glomerular filtration rate (eGFR) values corrected for overestimation might enable the prediction of RRF without 24-hr urine collection.

Patients and Methods: We reviewed medical records at Yeungnam University Hospital in Korea and identified all adults who had undergone continuous ambulatory PD for >1 month. We included Asian 592 patients whose RRFs were measured by both eGFR using serum creatinine and total CrCl using 24-hr urine and dialysate collections one or more times. We determined how well corrected eGFR values calculated using regression equations predict residual renal function (RRF).

Results: RRF values were correlated with all eGFR values for non-anuric patients of both genders. Peritoneal CrCl values were not correlated with eGFRs in anuric patients of either gender. In male, eGFR biases ranged from -5.66 to -3.25, and in females, from -5.96 to -3.21. These decreased when eGFR values were transformed to corrected eGFR values. The area under the curve of the corrected eGFR values was acceptable for a diagnosis of RRF loss.

Conclusion: The present study demonstrates that RRF is associated with corrected eGFR values derived using eGFR and peritoneal CrCl values. Corrected eGFR values obtained using these methods may provide an alternative means for predicting RRF without 24-hr urine collection.

Key Words: 사구체 여과율, 잔여신기능, 투석

Glomerular filtration rate, Residual renal function, Dialysis