



NEWS

European Renal Association -
European Dialysis and Transplant Association

NDT Study shows: Urinary Proteome Analysis Refines Diagnosis of Renal Dysfunction

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The prevalence of kidney disease is increasing significantly. This is due, on the one hand, to demographic trends – people are becoming older and loss of renal function is a symptom of old age. Yet demographic trends alone do not explain the steep upward trend in chronic kidney disease (CKD). CKD is frequently a direct sequela of hypertension and diabetes – diseases whose incidence in recent years has increased dramatically and whose incidence cannot be estimated in full due to the large number of unreported cases. These diseases result years later in chronic renal failure, especially when they are insufficiently treated or not treated at all. This means that the increase in CKD may be considered the immediate consequence of the growing number of diabetics and hypertension patients. The discomfoting aspect here is that we must fear that this is just the tip of the iceberg.

An option for reducing the dialysis population or at least for keeping it stable over the long term is to improve the early detection of chronic kidney disease. “We see an enormous potential in the field of early detection, especially, because early diagnosis of CKD can stop the disease from advancing, or slow its progress at least”, explains Prof. Carmine Zoccali, NDT Editor-in-Chief. “Therefore the paper of Gu et al [1] is of great importance. It shows that urinary proteomes can serve as a correlate and predictor of renal function in the general population. Urinary proteome analysis might be useful for stratifying people at risk of CKD”.

Indeed, the study that will be published in the December issue of NDT has shown that higher biomarker levels correlated with worse renal function: The rise of the biomarkers HF1 and SF predicted lowering of eGFR, the rise of HF2 predicted an increase in serum creatinine. Besides, HF2 and SF were – independent of albuminuria and eGFR – associated with cardiovascular events. “This is an interesting second aspect of the study. The urinary proteome analysis might even help us to stratify renal patients at high risk of developing cardiovascular complications. This might be of importance, because cardiovascular morbidity and mortality in renal patients is unduly high. Patients at risk might be detected and get an intensified therapy to prevent cardiovascular events”.

[1] Gu, Y-Mei et al. The urinary proteome as correlate and predictor of renal function in a population study. NDT 2014; Issue December, epub ahead of print.



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About ERA-EDTA

With more than 6,600 members, the ERA-EDTA ("European Renal Association – European Dialysis and Transplant Association") is one of the biggest nephrology associations worldwide and one of the most important and prestigious European Medical Associations. It supports basic and clinical research in the fields of clinical nephrology, dialysis, renal transplantation and related subjects. The ERA-EDTA supports a number of studies as well as research groups and has founded a special "Fellowship Programme" for young investigators as well as grant programmes. In order to involve young nephrologists in all activities of the ERA-EDTA the Council decided to create a Young Nephrologists' Platform (YNP). Besides, it has established various research networks and different working groups to promote the collaboration of nephrologists with other medical disciplines (e.g. cardiology, immunology). Furthermore, a "European Renal Best Practice" (ERBP) advisory board has been established by the ERA-EDTA to draw up and publish guidelines and position statements. Another important goal of the ERA-EDTA is education: several series of CME-courses as well as the annual congress offer an attractive scientific programme to cover the need of continuous medical education for doctors working in the fields of nephrology, dialysis and transplantation. The association's journals, NDT (Nephrology, Dialysis, Transplantation) and CKJ (Clinical Kidney Journal), are currently the leading nephrology journals in Europe. The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practice throughout Europe. Finally, ERA-EDTA is member of the European Kidney Health Alliance (EKHA), a consortium of renal societies that actively interacts with the European Parliament. For more information please visit www.era-edta.org