Evaluation of Renal Function and Renal Risk in the Twenty-First Century

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The global increase of obesity and type 2 diabetes has epidemic proportions. Worldwide, an estimated 2.16 billion subjects are overweight or obese and 382 million people have diabetes, a number that will rise to 592 million by 2,035. This pandemic may portend severe consequences in Nephrology. In parallel, a world-wide “epidemic” of chronic kidney disease (CKD) has been described [1], based, in part, on epidemiological studies interpreted to show an increasing frequency of CKD in the general population, using serum and urinary biomarkers thought to reliably identify subjects with CKD [2]. This phenomenon is directly related to the classification and staging of CKD in 2002, introduced by the National Kidney Foundation Kidney Outcomes Quality Improvement (KDOQI) program [3]. The classification scheme has been more recently updated to include risk strata for albuminuria [4].

Estimated glomerular filtration rate is the foundation for the KDOQI and KDIGO classification of CKD, but the validity of this approach using a single filtration marker (e.g., serum creatinine) has always been an issue when these approaches are applied beyond the validation popu-

lations included in the CKD Epidemiology Collaboration [5]. These concerns are especially relevant to obese and diabetics patients for whom the estimating coefficients for creatinine generation, which are based on age, gender and race may simply not be accurate. In accordance, new markers of renal damage that allows detecting early renal disease in diabetes and obesity are urgently needed.

These issues provided a major theme at the CME course sponsored by the DIABESITY Working Group of the European Renal Association/European Dialysis and Transplantation Association, which was held at The Clinical Research Center for Rare Diseases “Aldo e Cele Dacò,” in Ranica, Bergamo, Italy December 4 and 5, 2015 <http://www.marionegri.it/Diabetesity+Working+Group+Meeting/114126,News.html>. This issue of Nephron includes a number of papers from this course [6–13] that address these issues as well as other important aspects of the diabetes and obesity nexus.

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