LETTERS TO THE EDITOR

EKFC Versus CKD-EPI Equation in Young Adults? No Definitive Answer

To the Editor:

As main developers of the European Kidney Function Consortium (EKFC) creatinine-based equation,[1] we are puzzled by the results of the EKFC equation in comparison to the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) in young adults presented by Inker et al,[2] especially in the 18-25 years age range. Indeed, in our hands, the EKFC equation is particularly better than CKD-EPI in young people, allowing a smooth transition in estimating glomerular filtration rate (GFR) between adolescence and adulthood, a point that is not discussed.[1,3] In the Inker article, the CKD-EPI equation had a low bias (slight overestimation of 3.3 [95% CI, 0.0; 5.0] mL/min/1.73 m^2), whereas the EKFC equation was underestimating GFR (11.0 [95% CI, −13.6; −7.3] mL/min/1.73 m^2) in the 276 subjects aged between 18 and 25 years.[2] Several points need, however, to be discussed. First, the authors did not use the correct, US, race-free Q-values.[4] Second, the population included seems very specific, making a generalization of the results to all young people very questionable. Indeed, mean measured glomerular filtration rate was relatively high (median at 110.0 [93.0;126.9], assuming that a part of these subjects was hyperfiltrating. This is concordant with the fact that most patients are extracted from 2 cohorts (Table S1[2]), including patients with type 1 diabetes with high mean mGFRs (131.2 ± 19.5 and 149.4 ± 21.6 mL/min/1.73 m^2). Mean serum creatinine concentration in this subpopulation was 1.00 ± 0.80 mg/dL (sex-specific values and, according to the high SD, a nonparametric description seems more appropriate), which is particularly high for hyperfiltrating patients. We suspect a problem with creatinine calibration in these cohorts.[2,5]

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Article Information

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