Chronic Kidney Disease: Call for an Age-Adapted Definition

We agree with Trachtman[1] regarding the potential benefits for both young and elderly with age-based eGFR thresholds. We disagree with the points raised by Coresh *et al.*[2] First, despite the cited guidelines, there is not widespread consensus among practicing nephrologists that elderly patients with an eGFR of 45–59 ml/min per 1.73 m^2 and no albuminuria have diseased kidneys.[3] Further, primary care guidelines fail to see clinical benefit with this classification.[4] Second, although absolute risks are often important, humans have a limited lifespan and it is not clear that an hazard ratio of 1.2 for risk translates into clinically meaningful life years lost.[5] The statistical prognostic models relating eGFR to outcomes were on the basis of relative risk and the "heat maps" were on the basis of relative risk. The eGFR level associated with lowest risk (absolute or relative) declines with older age and this is not accounted for in the CKD definition. As with any epidemiologic study, a small hazard ratio of 1.2 could easily be due to bias (high-risk rather than just general population cohorts were used in the CKD prognosis consortium analyses) or residual confounding (such as systemic microvascular disease or lower nephron endowment linked to other complications of lower birthweight). Third, a causal pathway linking the age-related decline in eGFR to an increased risk of nonrenal outcomes is lacking. We concur that older patients with a low-normal GFR have less renal reserves putting them at increased risk for kidney failure, but this is too rare of an event to justify a disease label. High BP and glucose can be lowered with medications with a demonstrable clinical benefit, but there is no evidence that eGFR can be increased for a clinical benefit. A fairer comparison would be pulmonary function tests, which are reported with age-appropriate reference ranges due to the age-related decline in pulmonary function.[6] We hope that the CKD prognosis consortium and Kidney Disease Improving Global Outcomes will reconsider the age-related decline in eGFR for the purposes of identifying persons with diseased kidneys.

DISCLOSURES

None.

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