

Re: Estimation of Glomerular Filtration Rate With Creatinine-Based Versus Cystatin C-Based Equations in Kidney Transplant Recipients

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EDITOR

I read the recent publication by Savaj and colleagues in the Iranian Journal of Kidney Disease with great interest.1 Savaj and colleagues reached to the conclusion that "MDRD [the modification of diet in renal disease] equation could provide a closer estimate of GFR [glomerular filtration rate] to the cystatin C-based equations than other creatinine-based GFR calculations in kidney transplant recipients.1" Indeed, the estimation of GFR can be performed by several different techniques. In general, the gold standard cystatin C-based equations should be and must be used in the setting for kidney transplantation, which should have the availability for this laboratory test. However, in case that there is actually no test, the selection of other alternative must be done.

For the 3 methods for estimation, there are some considerations for selection. In addition to the correlation with the gold standard, the easy-to-use property should also be kept in mind. The MDRD might provide the best correlation, but it poses a complex process. At least, the regular creatinine calibration to reference methods has to be continuously run in the laboratory.² This can

bring the probable error in finalized calculation. According to a recent study, it can be seen that "the bias (mean percentage error) was -2% and the precision (mean absolute percentage error) was 23% for the MDRD estimation of GFR.3"

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