Comments on the comparison and agreement of equations to estimate glomerular filtration rate in diagnosis of occult chronic kidney disease

Nefrología 2008; 28 **(5)** 561

To the editor: From the greatest respect to the study conducted by Buitrago et al[1] comparing the agreement between different equations to estimate glomerular filtration rate (GFR), we would like to make some comments:

1. Buitrago et al conclude that the MDRD equation would exclude from diagnosis of chronic kidney disease (CKD) a group of people with a high cardiovascular risk who would be diagnosed using the Cockcroft-Gault (CG) equation, and that follow-up of such people found a similar proportion of coronary and cardiovascular events as in the group of patients with CKD according to the MDRD equation. This result agrees with recommendations of European guidelines for management of arterial hypertension,[2] which consider renal subclinical lesion the presence of a decreased GFR both by the MDRD and CG equations.

2. If the number of patients with occult CKD detected by each of the two equations in the study is analyzed, both the CG and MDRD equations would detect 50 of 118 patients (42.4%). The remaining patients would be diagnosed based on one of the equations used. Thus, 70 of the 118 patients (59.3%) would be detected by the CG equation, and 98 patients (83.1%) would be detected by the MDRD equation The MDRD equation detects almost 25% more patients who experienced 17% of coronary events and 22% of cardiovascular events in a 10-year follow-up period. The MDRD equation may be considered more effective for detecting the population at risk in such group.

3. Moreover, the MDRD equation may be automatically implemented in the operating system of laboratories with no additional cost, whereas each calculation of the CG equation requires manual entry of the patient weight, as well as height if we want to subsequently correct it for body surface area, as was done in the above study. This makes the MDRD equation more efficient.

4. In the study, reporting test data from patients collected between 1990 and 1994, no reference is made to whether serum creatinine levels measured in mg/dL were rounded to one or two decimals. This has a special relevance when studies on the prevalence of CKD are performed. Our group recently reported[3] that when a single decimal was used in our population for establishing diagnosis of CKD, prevalence increased 9%, while diagnosis of occult CKD decreased 26%. This decrease was much greater in males as compared to females.

Thus, and in agreement with the consensus document from the Spanish Society of Nephrology and the Society of Clinical Chemistry,[4] we think that the MDRD equation is more effective and efficient than the CG equation, and its use should be implemented in laboratory reports.

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4. Gracia S, Montañés R, Bover J, Cases A, Deulofeu R, De Francisco ALM, Orte LM. Documento de consenso: recomendaciones sobre la utilización de ecuaciones para la estimación del filtrado glomerular en adultos. *Nefrología* 2006: 26: 658-665.

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Kidney transplant from a living donor provides the same results as kidney transplant from a cadaveric donor

Nefrología 2008; 28 **(5)** 561-562

To the editor: The editorial comment[1] on the Guirado et al article[2] states that kidney transplant from living donors has obvious advantages over kidney transplant from cadaveric donors. In addition, given the relative scarcity of cadaveric donors, it is suggested that it would be convenient to increase the number of kidney transplants from living donors It is argued that the limited number of transplants from living donors is due to ignorance of this procedure by professionals and patient relatives, and that the fact that this possibility is not offered by physicians or not suggested by patients and relatives «reflects in a more or less obvious way the fear of nephrectomy in healthy people».

However, the article[2] explains that the better results achieved with kidney transplant from living donors stem from the statistical approach of the study, rather than the intrinsic kidney characteristics. Differences in patient and graft survival in univariate studies disappear when studies with a greater statistical power, multivariate, or with a control group of selected patients are