by the NKF, Mexican rheumatologists continue to use CrCl to estimate GFR. The importance of disseminating studies in other diseases, in addition to the NKF guidelines, is firstly due to the fact that the methods mentioned above do not require 24 hour urine collection and that health care systems would save thousands of dollars if this practice were generalised (worldwide); considering that a number of controlled international clinical trials use CrCl to estimate GFR.[9,10]

These findings show that although the guidelines suggest the use of more exact, less expensive methods, Mexican rheumatologists continue to use methods that are both more expensive and less reflective of true GFR. We must promote studies among doctors showing the benefits for patients in terms of both economic sustainability and reproducibility. If our results among Mexican rheumatologists were similar on a global level, the savings incurred by using better estimation methods could amount to millions of dollars.

Conflicts of interest

The authors declare they have no potential conflicts of interest related to the contents of this article.

1. Cervera R, Khamashta MA, Font J, Sebastiani GD, Gil A, Lavilla P, et al. Morbidity and mortality in systemic lupus erythematosus during a 10-year period: a comparison of early and late manifestations in a cohort of 1,000 patients. Medicine (Baltimore) 2003;82(5):299-308.
2. Stoll T, Seifert B, Isenberg DA. SLICC/ACR Damage Index is valid, and renal and pulmonary organ scores are predictors of severe outcome in patients with systemic lupus erythematosus. Br J Rheumatol 1996;35(3):248-54.
3. Soares AA, Eyff TF, Campani RB, Ritter L, Camargo JL, Silveiro SP. Glomerular filtration rate measurement and prediction equations. Clin Chem Lab Med 2009;47(9):1023-32.
4. K/DOQI clinical practice guidelines for chronic kidney disease: evaluation, classification, and stratification. Am J Kidney Dis 2002;39(2 Suppl 1):S1-266.
5. Levey AS, Coresh J, Balk E, Kausz AT, Levin A, Steffes MW, et al. National Kidney Foundation practice guidelines for chronic kidney disease: evaluation, classification, and stratification. Ann Intern Med 2003;139(2):137-47.
6. Gordon C, Jayne D, Pusey C, Adu D, Amoura Z, Aringer M, et al. European consensus statement on the terminology used in the management of lupus glomerulonephritis. Lupus 2009;18(3):257-63.
7. Martínez-Martínez MU, Borjas-García JA, Magaña-Aquino M, Cuevas-Orta E, Llamazares-Azuara L, Abud-Mendoza C. Renal function assessment in patients with systemic lupus erythematosus. Rheumatol Int. 2011 May 21. [Epub ahead of print].
8. Peláez-Ballestas I, Sanin LH, Moreno-Montoya J, Alvarez-Nemegyei J, Burgos-Vargas R, Garza-Elizondo M, et al. Epidemiology of the rheumatic diseases in Mexico. A study of 5 regions based on the COPCORD methodology. J Rheumatol Suppl 2011;86:3-8.
9. Mak A, Mok CC, Chu WP, To CH, Wong SN, Au TC. Renal damage in systemic lupus erythematosus: a comparative analysis of different age groups. Lupus 2007;16(1):28-34.
10. Mak SK, Lo KY, Lo MW, Chan SF, Tong GM, Wong PN, et al. Efficacy of enteric-coated mycophenolate sodium in patients with active lupus nephritis. Nephrology (Carlton) 2008;13(4):331-6.

Marco U. Martínez-Martínez, Carlos Abud-Mendoza
Unidad Regional de Reumatología y Osteoporosis. Hospital Central Dr. Ignacio Morones Prieto. San Luis Potosí (México).
Correspondence: Carlos Abud-Mendoza
Unidad Regional de Reumatología y Osteoporosis. Hospital Central Dr. Ignacio Morones Prieto, Av. V. Carranza 2395, 78240 San Luis Potosí, Mexico.
c_abud@hotmail.com
marcomtzmtz@hotmail.com

Chronic kidney disease in the elderly: the impact of patients' sex

Nefrologia 2012;32(1):123-4
doi:10.3265/Nefrologia.pre2011.Dec.11249

To the Editor,

In epidemiological studies we generally find a higher prevalence of chronic kidney disease (CKD) in women than in men, regardless of age.[1,2] The study by Labrador et al assesses the prevalence of occult renal disease (defined as an estimated glomerular filtration rate (eGFR) below 60ml/min and serum creatinine within the normal range), and the authors found this condition in 43.5% of the women in a group with a mean age of 77 years.[3]

We therefore propose studying sex as a factor involved in GFR in a cohort of elderly patients with both normal and altered serum creatinine (sCr) levels. We will also analyse the effect of this factor in patients considered as carriers of occult renal disease.

Between January and April 2006, we conducted a cross-sectional study in a population with a mean age of 83 years (range: 69-97 years) that was recruited when patients came in for scheduled check-ups with the Geriatric Medicine and General Nephrology Departments at the General Hospital of Segovia. In this group, 38 patients had sCr within the normal range: Group 1, sCr ≤1.1mg/dl (range 0.7-1.1): 6 males and 32 females; 42 had altered sCr. Group 2, sCr >1.1mg/dl (range 1.2-3): 19 males and 23 females.3% of the total had diabetes mellitus, and 81.3% had arterial hypertension. GFR was estimated using the abbreviated MDRD method[4] and the Cockcroft-Gault formula.[5]

Table 1 shows the mean GFR given by the formulae, broken down by group and sex.

Out of the patient total, 56 (70%) had a GFR (MDRD) <60ml/min. Of the patients with a GFR<60ml/min according to MDRD, 18 had sCr within the normal range (100% female), while 38 had a baseline sCr>1.1mg/dl (15 males [39.5%] and 23 females [60.5%], *P*=.001.

The 18 patients with a normal sCr and GFR by MDRD <60ml/min (occult renal disease) had a mean age of 81.33±6 years.

Table 1. Mean estimated baseline glomerular filtration rates in the study group broken down by sex

	Male	Female	*P*
Group 1 (MDRD (ml/min)	78.01 (7)	60.85 (8)	0.000
Group 1 (Cockcroft-Gault) (ml/min)	58.78 (11)	45.63 (9)	0.007
Group 2 (MDRD (ml/min)	43.60 (15)	37.30 (8)	NS
Group 2 (Cockcroft-Gault) (ml/min)	31.86 (16)	29.69 (6)	NS

Group 1: sCr ≤1.1mg/dl (6 males, 32 females). Group 2: sCr >1.1mg/dl (19 males, 23 females). NS: not significant.

In our study, we also found that eGFR (estimated using the two methods listed here) in women with sCr within the normal range was significantly lower than in men. However, these differences are not as pronounced in the patient group with altered sCr (Group 2). Our data therefore confirm a higher prevalence rate of CKD in women if they are evaluated by eGFR; this statement is especially true for the subjects in Group 1.

The differences in GFR between the sexes and study groups may lie within the mathematical formulae used to estimate GFR. The mathematical formulae used in our study are based on sCr, which involves the patient's muscle mass and nutritional state. Therefore, these significant differences in GFR between the sexes among patients with a normal sCr are more likely to show women's smaller muscle mass rather than their true GFR. It is also important to note that the MDRD formula was designed in patients with altered renal function and not validated in a healthy population: applying the MDRD formula to estimate GFR in individuals with a normal sCr may underestimate true GFR by up to 50%.[6] On the other hand, when we use the MDRD formula in patients with altered renal function, the differences between males and females are less pronounced. This means that the resulting eGFR may successfully show the presence of kidney disease rather than the patient's nutritional state and/or muscle mass.

In conclusion, sex is a factor to consider when checking for chronic kidney disease in the elderly. The systematic use of formulae based on creatinine levels can lead to healthy elderly women being considered carriers of occult renal disease.

Conflicts of interest

The authors declare they have no potential conflicts of interest related to the contents of this article.

1. Zhang QL, Rothenbacher D. Prevalence of chronic kidney disease in population-based studies: systematic review. BMC Public Health 2008;8:117.
2. Chadban SJ, Briganti EM, Kerr PG, Dunstan DW, Welborn TA, Zimmet PZ, et al. Prevalence of kidney damage in Australian adults: The AusDiab kidney study. J Am Soc Nephrol 2003;14: S131-38.
3. Labrador PJ, Mengotti T, Jiménez M, Macías M, Vicente F, Labrador J, et al. Insuficiencia renal oculta en Atención Primaria. ¿Un problema exclusivo de mujeres? Nefrologia 2007;27:716-20.
4. Levey AS, Greene T, Kusek JW, Beck GJ. Simplified equation to predict glomerular filtration rate from serum creatinine. J Am Soc Nephrol 2000;11:828.
5. Cockroft DW, Gault MH. Prediction of creatinine clearance from serum creatinine. Nephron 1976;16:31-41.
6. Heras M, Fernández-Reyes MJ, Guerrero MT. Sobre la estimación de la función renal en el anciano: implicaciones del uso sistemático de la fórmula Modification of Diet in Renal Disease para el ajuste farmacológico. Rev Esp Geriatr Gerontol 2010;45(1):50-1.

Manuel Heras[1], Pedro García-Cosmes[2], M. José Fernández-Reyes[1], M. Teresa Guerrero[3], Rosa Sánchez[1]

[1] Servicio de Nefrología. Hospital General de Segovia. Spain.

[2] Servicio de Nefrología. Hospital Universitario de Salamanca. Spain.

[3] Servicio de Geriatría. Hospital General de Segovia. Spain.

Correspondence: Manuel Heras
Servicio de Nefrología.
Hospital General de Segovia.
40002 Segovia. Spain.
mherasb@saludcastillayleon.es
manuhebe@hotmail.com

C) BRIEF CASE REPORTS

Adrenal myelolipoma associated with primary hyperaldosteronism

Nefrologia 2012;32(1):124-5

doi:10.3265/Nefrologia.pre2011.Nov.11195

To the Editor,

We present the case of a kidney recipient who recently underwent laparoscopic surgery for an adrenal myelolipoma associated with primary hyperaldosteronism. Myelolipomas are rare tumours; they are benign, grow slowly, and vary in size. They are made up of adipose and haematopoietic tissue. These tumours are typically non-functional and if they reach a large size, they can cause pain, pressure on adjacent organs and acute intratumoural or retroperitoneal bleeding.

The patient was a male aged 54 years, obese and a smoker, with long-standing hypertension (HT) and chronic kidney disease (CKD) secondary to malignant nephroangiosclerosis that was diagnosed by kidney biopsy in 2000. He started peritoneal dialysis in 2006 and underwent a deceased donor transplant in 2008. Previous x-ray studies already showed a right adrenal mass compatible with a myelolipoma; in 2005, it measured 5*5.4cm in