

The reality of kidney transplant in Colombia

La realidad del trasplante renal en Colombia

Álvaro García G¹, Joaquín R Rodelo C²

¹ Internista-Nefrólogo, Profesor Asociado de la Universidad de Antioquia, Grupo de Trasplantes de Nefrón - U de A-HUSVF, director de UR de Fresenius Envigado, Antioquia, expresidente de ASOCOLNEF

² Internista -Nefrólogo, Magíster en Epidemiología, profesor asistente de la Universidad de Antioquia, coordinador de posgrado de Nefrología

The number of patients who suffer chronic kidney disease (CKD) in our country and the overwhelming increase reflect what is happening in the world; where this disease has a pandemic appearance. Most of the patients are diagnosed grade 5 of CKD; in this stage the recommended treatment is the renal replacement therapy (RRT) (dialysis or transplant), and due to its operating high costs may destabilize any health system in the world 1. This is why, two non-exclusive schemes emerged in response to this challenge :First one: through nephrology and complementary medical specialties, to modify or delay the history of this entity, by controlling diseases with a high incidence on their etiology, offering an excellent quality of life to the patient and coordinate all previous aspects related to stage 5; which is a very incipient scheme in Colombia (2,3).

This editorial aims to increase the best treatment alternative for CKD patients in stage 5, renal transplant (TX) 4. Based on the Spanish model used for organs coordination and procurement, good yields were initially achieved in relation to organ transplant, in some regions more than others (5) in Colombia. But the prevalence of CKD disease, was overflowed in the last 10 years in Colombia. To have an idea about this data, the report of patients on dialysis in the last 3 years (2011-12-13) were : 25.232, 27.637 and 28.880 respectively(6) exceeding the percentage of TX in the same periods very broadly 23.9, 25.9, 25.6 PMP; giving as a result a very significant increase in the waiting list : 1.334, 1.763, 1.839 patients per year; with a mortality rate close to 100 patients per year; these results show a high unsatisfied demand in our country.

The overall increase of deceased donors is very low based on the national comparison data from the last 3 years, showing a tendency to decrease, as it is shown here :23.9, 25.9, 25.6 PMP, (5) in spite of the massive donor campaigns conducted by different state organizations or individuals. The main predictors of good survival for both patient and renal graft in the short or long term, also known by different groups of transplant worldwide, are as follows : donor age, creatinine to TX, time of cold ischemia, number of HLA compatibilities, HLA DR and Dqs, presence of specific anti-donor antibodies (DSA) at TX time, time on dialysis, onset of delayed graft function (DGF) and TX preemptive without going through dialysis) which is important in order to reduce costs and resources 7,8 the living donor TX in a biological or emotional way, including the non blood relative (good Samaritan) shows the best survival rate of both graft and patient at 1,5 and 10 years, possibly explained by the shorter ischemia time, better histo compatibilities, TX optimal timing, and in addition, the minimal risks to nephrectomy for a well-selected donor, when modern techniques of laparoscopy and pain control are used, these techniques allow a fast recovery for

the donor(9) considering this therapeutic modality and excellent alternative treatment for the patient in stage 5 (10). In this issue, Garcia et al, submit an extensive review of living donor transplant showing the greatest experience of this type of procedure in Colombia, with results comparable to the world literature (5 year survivals of 87%)

The donor and recipient as a single medical-surgical entity is the most important aspect to consider in our environment, which must be assumed in all its aspects by health provider entities, both in the TX initial stage and follow-up (5,7, 12), for this purpose it should have fully defined protocols(7,12). Colombian legislation has a regulatory entity on transplantation and donation which establishes quality parameters for the IPS in charge of different transplantation, based on physical resources, diagnostic aids, human and professional resources, with a standard in the quality of the results obtained at the beginning and follow-up stages for both the donor and the recipient(5)

Both Colombian and world current reality are extremely expectant since there are more patients in waiting lists and fewer dead donor organs available; The focus should be again on the performance of living donor transplants for all the advantage it offers and the minimum risk that the donor undergoes when he is selected and treated by using cutting-edge technology(13)

References

1. KDIGO- 2012, Practice guideline for the evaluation and management of Chronic Kidney disease, Kidney International supplements (2013)3,vi.
2. Wei SY, Chang YY, Mau LM, Lin MY, Chiu HC, et al. Chronic Kidney disease care program improves quality of pre – end stage renal disease care, and reduces medical cost. *Nephrology (Carlton)* 2010 Feb 15;(1):108-15.
3. Smart NA, Titus TT, Outcomes of early versus late nephrology referral in chronic kidney disease a systematic review, *Am J Med* 2011 Nov;124(11):1037-80e2.
4. Abecassis M, Bortlett ST, Collins AJ, Davis CI, Delmonico FL, Fredewald JJ, et al., Kidney transplantation as primary therapy for end – stage renal disease: a National Kidney Foundation/kidney disease outcomes quality initiative (NKF/ KDOQI) conference. *Clin J Am Soc Nephrol* 2008;3(2)471.
5. Coordinación Nacional/redde donación y trasplantes (Ins@ins.gov.co, www.ins.gov.co).
6. Base de datos resolución 4700/200 APB, ECC Fuerzas Militares y Policía de Colombia.
7. New OPTN requirements and resources for living donor kidney transplant programs. *Organ Procurement and Transplantation Network (OPTN). Prog. Transplant* 2013;Jun23(2):117.
8. Charpentier B, Durrbach A, Transplantation: pre-emptive kidney transplantation- perfect, but when? *Nat. Rev Nephrol* 2011;7:550-1.
9. Thomson DA, Muller E, Kahn D. Laparoscopic kidney donation- giving in the best way possible. *S Afr J Surg*. 2014 Jun6;52(2):34-5.
10. Leichtman A, Abecassis M, Barr M, Charlton M, Cohen D, Confer D, et al. Living kidney donor follow- up: state of the art and future directions, conference summary and recommendations. *AJ Transplant*. 2011 Dec;11(12):2561-8.
11. Base de datos del grupo de trasplantes Nefron, U de Ay HSVP de Medellín (www.nefron.com.co).
12. Poqqio ED, Braun WE, Davis C, The science of stewardship: due diligence for kidney donors and kidney function in living kidney donation – evaluation, determinants, and implications for outcomes. *Clin J Am Soc Nephrol* 2009 Oct;4(10):1677-84.
13. Harvat LD, Shriff SZ, Garg AX Global trends in the rates of living kidney donation. *Kidney Int*. 2009;75:1088-98.