



Editorial

Living donor kidney transplantation: current status and future perspectives — Can we do more?



Trasplante renal de donante vivo, situación actual y perspectivas futuras ¿Podemos hacer más?

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Living donor kidney transplantation (LDKT) offers a better quality of life and clinical outcomes, including patient survival, compared with remaining on dialysis or receiving a deceased donor kidney transplant.^{1–3} Therefore, it represents one of the most effective and cost-efficient therapeutic alternatives for patients with advanced chronic kidney disease (ACKD).⁴ However, in a country that has made organ donation and transplantation a hallmark of its healthcare and social identity, it is paradoxical that living kidney donation remains an unresolved issue.⁵ Spain, the undisputed world leader in organ transplantation, barely exceeds 400 living donor kidney transplants per year, figures far from those of countries such as Norway, the United Kingdom, or the Netherlands, where LDKT accounts for up to 30% of kidney transplants performed annually.⁶

Despite the evidence supporting the benefits of LDKT—longer graft survival, better quality of life for the recipient, and lower cost for the healthcare system—,^{3,7} its growth in our country remains limited. But why does LDKT advance so slowly in a supposedly ideal setting? What invisible barriers—cultural, organizational, and professional—persist? And above all, what can—and should—we do to transform this therapeutic modality from the exception into the norm?

Far from merely describing the problem, this editorial proposes a critical analysis, an invitation to action, and suggestions for improvement. Following this line of argument, we can assert that if the Spanish transplant model has demonstrated anything, it is that when there is genuine commitment, when boundaries are challenged, results follow.

Limitations of LDKT in Spain

Specific recommendations aimed at improving each phase of the living kidney donation process have been recently published^{8,9}; however, discussing the limitations of LDKT in Spain means pointing

to a set of multiple, intertwined barriers that, like a complex Gordian knot, require bold decisions to untangle. This editorial highlights the most relevant limitations.

Limited social and cultural awareness

Despite decades of success in deceased donation, LDKT remains largely unknown to much of the population, and even to numerous patients with ACKD who associate organ donation exclusively with deceased donation. It is possible that a significant proportion of transplant candidates are unaware of the possibility of LDKT or hold erroneous beliefs about its safety and outcomes, directly impacting the process.¹⁰

Territorial inequality

Differences in LDKT activity among autonomous communities are notable. While some hospitals lead and have established successful programs, others barely perform any procedures. Territorial equity is an outstanding debt that conditions opportunities and outcomes.⁵

Lack of promotion of preemptive transplantation

Preemptive kidney transplantation remains marginal in our country. LDKT reaches its fullest expression when it avoids dialysis, providing indisputable clinical benefits. However, late referrals to transplant clinics and the limited anticipation in identifying donors mean that this possibility remains more aspiration than reality.

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Healthcare and logistical barriers

The evaluation of living donors is complex—it cannot and should not be simplified—, its duration is variable, and in some centers it can become excessive. The pathways for evaluating and preparing donors and recipients are, in too many cases, slow, cumbersome, and discouraging. The lack of dedicated personnel, allocated resources, and clear organizational prioritization hinders what could be an agile and efficient process. All of this can discourage LDKT among donors, patients, and healthcare professionals.^{11,12}

Professional and ethical reluctance

Doubts, fears, and prejudices about LDKT persist among some healthcare professionals who frequently project their concerns onto patients and their potential donors. This is the so-called "protective bias" which, under the premise of avoiding risks to the donor, despite their low incidence, generates conservative attitudes and ultimately limits opportunities for the recipient.¹² All donors should be informed of the (very low) risk of mortality and of developing kidney failure in the medium to long term.¹³

Respecting the autonomy of the potential donor does not invalidate the prudence of professionals; therefore, the ethical justification for declining a donation is valid when, after evaluation, the risk of donation is deemed too high.¹⁴

What if we dared to do more? Proposals for real change

Improving LDKT requires decisive measures at multiple levels. Spain cannot resign itself to maintaining its current level of LDKT as if it were an immovable ceiling. We need a paradigm shift, involving:

- **National strategy to promote LDKT.** Bold communication campaigns targeting the general population and kidney patients are needed to demystify living donation and make its real benefits visible, not only for the recipient, but also as an altruistic and transformative act for the donor.
- **Ensuring territorial equity.** Cooperation between centers with different levels of experience, the development of inter-hospital networks, and the transfer of best practices would help reduce regional differences in access to LDKT.
- **Active promotion of preemptive transplantation.** Coordination between ACKD clinics and transplant teams must be strengthened. This good relationship helps to identify candidate patients and potential donors early, provide timely information, early referral, and rapid evaluation. Both nephrologists and nursing staff involved in the management of ACKD must be the main protagonists in providing information about LDKT.
- **Optimization of healthcare pathways.** Streamlining pre-transplant evaluations through standardized protocols, guaranteed maximum evaluation times, and prioritized diagnostic resources is key.
- **Training and awareness among healthcare professionals.** Specific training on LDKT in continuing education programs is very important, addressing clinical, ethical, and communication aspects. New technologies (e-learning, social media, patient focus groups) can play an essential role in this process.¹⁵ All of this would help to eradicate prejudices, update knowledge, and make LDKT a routine and active recommendation.

Final reflection

The recent history of kidney transplantation in Spain is full of extraordinary milestones that once seemed impossible: tripling

donations, breaking transplant records, developing pioneering exchange programs... Why not now aspire to doubling living donor kidney transplants?

We have the necessary ingredients to also lead in LDKT: a solid healthcare system, specialized teams, and a society committed to donation.

Perhaps the most unsettling aspect of LDKT in Spain is that we could do much better without the need for major technological innovations, without enormous investments, without biomedical miracles. It would suffice to adjust the focus, prioritize what matters, clinical leadership, and a firm commitment to overcome barriers and dare to challenge inertia.

LDKT is neither a luxury nor an exceptional option. It should be regarded as an essential therapeutic tool that saves and transforms lives. Postponing its advancement out of fear, convenience, or routine is unacceptable.

In a country that has made transplantation its healthcare emblem, settling for the current LDKT figures is not prudence: it is resignation.

As George Bernard Shaw aptly said: "If we want to change reality, we must first change the way we think. Are we willing?"

Declaration of competing interest

The authors declare no conflicts of interest.

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