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Living donors: Caring for the trailblazers of progress in transplantation

Ashley Lau, BS¹, Rebecca E. Scully, MD MPH¹, Mats Brännström, MD PhD², Stefan G. Tullius, MD PhD^{1,3}

¹Division of Transplant Surgery, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA

²Departments of Obstetrics and Gynecology, Sahlgrenska Academy, University of Gothenburg, Göteborg, Sweden

Advances in transplant have largely been driven by the trust and generosity of living donors. The first organ transplant in 1954, a kidney donated by Ronald Herrick to his twin brother Richard opened the door to clinical transplantation.¹ Nearly 40 years later, the first living donor liver transplant followed, and, in 2014, the first child was born after a live donor uterus transplant, again with living donors as trailblazers, making the impossible possible.²

Sixty-four years ago, Richard Herrick asked his doctors who would be taking care of his twin brother and kidney donor, Ronald after his donation, a question that is no less important today. Thorough, multidisciplinary evaluations and technical advances have decreased the risk of donation, long-term health consequences remain that we are only beginning to understand. Of particular clinical relevance are the 0.1–0.5% of living kidney donors who go on to require dialysis.³

To promote donor health, the Organ Procurement and Transplantation Network (OPTN) in the US now requires transplant centers to document the follow-up of a minimum of 80% of clinical data during a 2-year period.⁴ However, even with strong educational efforts in place, less than half of US transplant centers can meet this requirement. A quick reality check: living donors have received a clean bill of health at the time of donation and the vast majority continues to enjoy an excellence health; understandably, the motivation to seek medical advice is small.

Thus far transplant centers have shouldered the burden of follow-up costs for donors as such expenses are currently not reimbursable. Additional costs for transportation or lost wages

³Corresponding author: Stefan G. Tullius, MD, PhD, Division of Transplant Surgery, Brigham and Women's Hospital, Harvard Medical School, 75 Francis St., Boston, MA 02115, USA, stullius@bwh.harvard.edu, Phone: ++1-617-697-9294, Fax: +1-617-582-6167.

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may occur for the healthy donor. Indeed, monetary issues appear to be particularly relevant with an association between low socioeconomic status and risk of ESRD after donation.

There have been a few large retrospective studies examining outcomes after kidney donation. Efforts to improve the care of living donors, including the Kidney Disease: Improving Global Outcomes (KDIGO) Living Donor Work Group⁵, are ongoing. However, a number of gaps persist in our understanding of risks for living donors. The Living Donor Collective, an effort of the Scientific Registry of Transplant Recipients (SRTR), has been charged with a broad spectrum of analysis and tasks: the initiative aims to identify and tackle factors that prevent follow-up while supporting long-term care of donors, survey living donors long-term, enroll and monitor living donors and candidate donors who elected not donate, identify barriers to donation and work towards and optimize living donation in the US.⁶

Instituting mobile health technologies or ambulatory services may also help to improve data collection from otherwise healthy donors and minimize the burden of follow-up.

Financial implications play another important role: long-term regulatory changes such as the Living Donor Protection Act, which would prohibit insurance companies from denying or limiting coverage of donors will help assuring the long-term health of those who risked personal harm for the benefit of others.

Just over sixty years ago, clinical medicine was radically transformed. In giving a kidney to his brother, Ronald Herrick demonstrated that organ donation, previously only a figment of imagination, could be safely performed. Countless recipients have since benefited from that act of courage. The future of transplantation depends on the participation of living donors, and it is the responsibility of all who care for them to ensure that they continue to light the way forward.

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