

Living kidney donation

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1 Benefits of kidney transplantation from living donors are improved compared with dialysis

Kidney transplantation from living donors has improved survival rates, better quality of life and lower costs for health care for eligible patients with end-stage kidney disease than dialysis.^{1,2} Kidney transplants from living donors also last about 25% longer (typically 20–25 years) and are associated with better overall survival than transplants from deceased donors.¹

2 Living kidney donors remain at low risk of end-stage kidney disease³

Potential donors undergo extensive evaluation to assess surgical and long-term risks (Appendix 1, www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.170304/-/DC1). The risk of death is 3 in 10 000 donor nephrectomies.² Perioperative complications, such as infection or bleeding, occur in fewer than 10% of these procedures.² After 15 years, end-stage kidney disease is diagnosed in about 0.3% of donors.³ Life insurance premiums are unlikely to be affected.⁴

3 About 400 Canadians become living kidney donors annually¹

Most living kidney donors know their recipient but are not necessarily related or share the same blood group. Fewer than 3% of living kidney donors are anonymous and do not have an intended recipient.¹ For all potential living kidney donors, assessment of eligibility is started after they have contacted a living kidney donor transplant program (Box 1). There are over 3000 Canadians with end-stage kidney disease on the transplant waiting list.¹

4 Preeclampsia and gestational hypertension are more likely to develop in living kidney donors⁵

The absolute increased risk of preeclampsia and gestational hypertension, compared with nondonors, was 3% in an Ontario study that included 85 living kidney donors (131 postdonation pregnancies) who were followed for up to 20 years.⁵ No significant differences were found for other important maternal and fetal outcomes. Women can be reassured that risks to pregnancies after kidney donation are minimal.

5 Annual follow-up is recommended after kidney donation²

Living kidney donors may have an increased risk of hypertension and proteinuria after donation.² For early identification of these modifiable risk factors for progressive loss of kidney function, annual monitoring of blood pressure, serum creatinine level and urine albumin:creatinine ratio is suggested after donation.²

Box 1: Supplementary resources for people interested in living kidney donation

General information from the Kidney Foundation of Canada/La Fondation canadienne du rein regarding kidney transplantation, including living kidney donation, is available at:

- English: <https://www.kidney.ca/organ-donation>
- Français: <https://www.kidney.ca/dons-dorganes>

Contact information for all living donor kidney transplantation programs in Canada is available at:

- English: <https://blood.ca/en/organs-tissues/becoming-live-kidney-donor>
- Français: <https://blood.ca/fr/organes-tissues/donner-rein-son-vivant>

This site also provides information regarding the Canadian Blood Services/La Société canadienne du sang Kidney Paired Donation Program for immunologically incompatible living kidney donors and their intended recipients.

References

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