

What is the ESRD Risk for Living Donors?

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ISSUE

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DATA

Kidney donors have lower long-term risk of ESRD compared to the general population. This has been attributed to the careful screening process that excludes candidates with pre-existing conditions from donation. However, two recent studies, one from Norway and one from the United States, examined ESRD risks for living donors compared to healthy non-donors (not the general population) (1,2). Consistent with prior studies, a low absolute risk of ESRD (< 0.5% at 15 years post kidney donation and the lifetime risk estimated at 0.9%) was reported (2). While the relative risk of ESRD in donors was less than the general population, donors have a relative risk of ESRD of between 8 to 11 times compared to healthy non-donors. All of the donors with ESRD in the Norwegian study were family members of the recipients, and most developed immune-mediated renal disease. Despite their limitations (3-6), these studies provide the best information to date on donor risks. A risk calculator has recently been developed for use in counseling potential kidney donors. Demographic and health characteristics may now be used to estimate the projected long-term pre-donation risk of ESRD in donor candidates. A post donation calculator is not available (7)

RECOMMENDATION

1. The risk of ESRD in donors is higher than in healthy screened non-donors. The risk appears higher in donors who are genetically related to the recipient.
2. Donors should be informed that, while there is an increased relative risk of ESRD after kidney donation, the absolute risk for ESRD is still less than 0.5% at 15 years and 0.9% for lifetime risk compared to 3.2% for the general population.
3. A risk calculator can be used for guiding the evaluation and informed consent process.

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Note: The recommendations in these chapters are the opinions of the Living Donor Community of Practice of AST. They are not meant to be prescriptive and opinions by other groups or institutions may be equally valid.