

Abstract

Few investigations about safety of post-donation living kidney donors have been conducted, especially in Japanese. I reviewed medical records of 1519 living kidney donors who donated in Tokyo women's medical university hospital. Using all the data or partially, I investigated their post-donation trends in glomerular filtration rate (GFR) and risk for kidney disease such as persistent proteinuria or progressive renal dysfunction, and end-stage renal disease (ESRD). Most (> 90%) donors developed GFR corresponding to chronic kidney disease (CKD) stage3, however, showed stabilized trends in GFR until 3 years after donation, distinct from those of CKD patients in the general population. Meanwhile, donors who developed ESRD had maintained GFR for long period, but which started to decline after having comorbidities known as progression factors of CKD. They had higher incidence of proteinuria, acute cardiovascular events, severe infection, and hospitalization due to accelerating factors of CKD than those not developing ESRD. Furthermore, donors having persistent glomerular hematuria both pre- and post-donation had significantly higher risk for kidney disease after donation. Kidney donors might be inappropriate for labeling as CKD, however, they should be carefully evaluated and followed for long period with attention on CKD risk factors, especially those with glomerular hematuria.