Living kidney donation does not increase risk of death or heart disease for older adult donors, research shows

Date: July 9, 2014

Source: Perelman School of Medicine at the University of Pennsylvania

Previous studies linking older age with kidney and heart disease have raised concerns about the safety of living kidney donation among older adults. However, in the first study to look closely at this issue, researchers at the Perelman School of Medicine at the University of Pennsylvania report that older kidney donors (55 years and above) enjoy similar life expectancy and cardiovascular health as very healthy older people who did not donate their kidneys. In light of the ever increasing organ transplant waitlists, the authors of the study hope the results will provide reassurance and encouragement to older individuals who are considering living donation.

The study is published this week as the cover article in the American Journal of Transplantation.

The new study matched 3,368 donors 55 years old or older with the same number of healthy non-donors, and followed them for a median of 7.8 years. Each donor was matched to a healthy older adult who was the same race, sex and very close in age. The donors and the matched healthy non-donors had similar life expectancy. In addition, researchers linked the records of the study population to a Medicare database. Among the group with Medicare insurance, donors and healthy non-donors had similar rates of cardiovascular disease and diabetes. The donors did see their primary care doctors more often, but the authors suggest that is likely due to post-donation follow-up care.

"As the population of patients on dialysis in the United States ages, it is becoming more common for older individuals, including people in their 60s and 70s, to consider live kidney donation" said lead author Peter Reese, MD, MSCE, assistant professor of Medicine in the Renal-Electrolyte and Hypertension Division, and director of the PROTECTS transplant analytics center at the Hospital of the University of Pennsylvania. "The trend makes sense because for patients on dialysis -- who are often then added to the kidney transplant waitlist -- the pool of potential donors includes people in the same age group, such as their spouses and friends. However, until now we haven't had a lot of information about the effects of living donation for patients in this age group, which has limited our ability to counsel them about risks."

While the research team emphasizes the importance of the study, the new data must be considered along with information from other significant studies of outcomes after kidney donation. For example, Reese says older donors should be prepared for a longer recovery period after surgery than younger donors experience. They must also consider the risk of surgical complications like hernias, and they should understand that they face a very small risk that they might need dialysis one day themselves.

"Our results provide valuable new data that can be used by transplant centers and physicians, and may well affect the decision-making for older patients considering donation," says Reese, adding that although the results are positive, more information about how other comorbidities might affect kidney donation outcomes is necessary. "Future studies are needed to better understand outcomes for potential donors living with chronic medical problems such as hypertension and obesity, which are common in older populations."

Story Source:
The above story is based on materials provided by Perelman School of Medicine at the University of Pennsylvania. Note: Materials may be edited for content and length.

Journal Reference: