

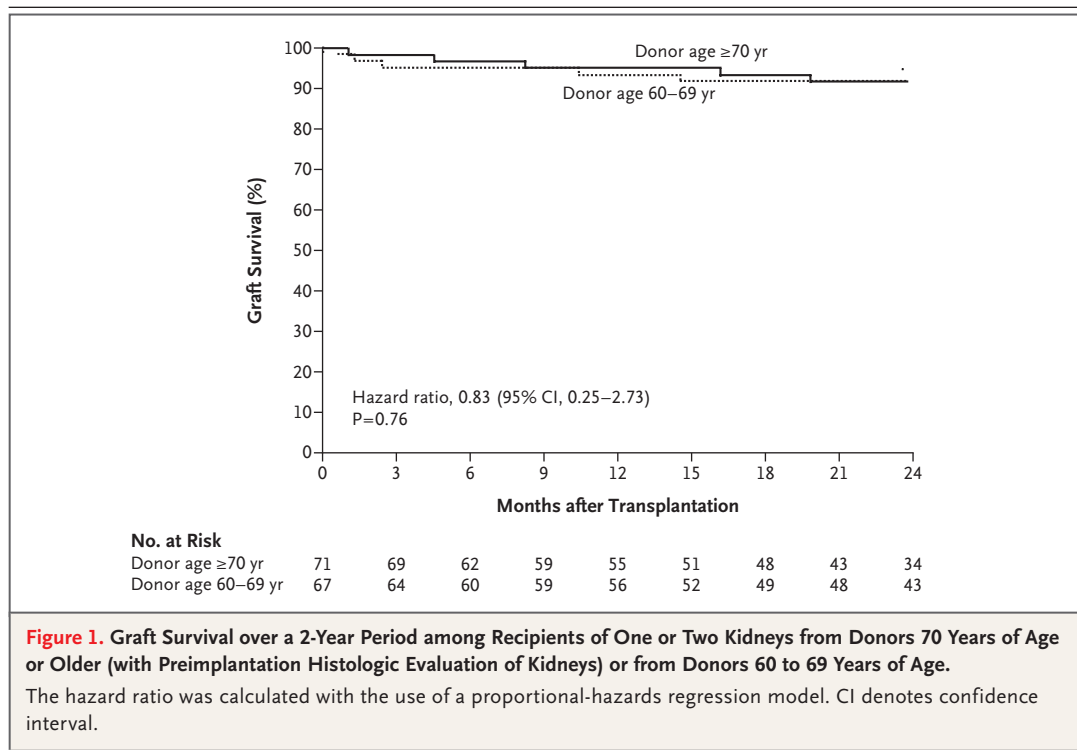
Outcome of Renal Transplantation from Very Old Donors

TO THE EDITOR: The use of kidneys from elderly donors may permit more transplantations, but it has been associated with poorer outcomes than transplantations performed with kidneys from younger donors.¹ According to data from the United Network for Organ Sharing, the rates of graft loss and patient death among recipients of grafts from donors 70 years of age or older are 24% and 21% higher, respectively, than rates among recipients of grafts from donors 60 to 69 years of age.² We previously reported that the outcomes of transplantations performed with kidneys from donors older than 60 years of age were similar to the outcomes of transplantations performed with kidneys from young donors when the kidneys from the older donors were selected and allocated on the basis of histologic changes observed before implantation.^{3,4}

In this more recent study involving patients referred to the transplantation centers in Padua and Verona, Italy, between 2000 and 2006, we compared the graft outcome among 71 recipients of one or two kidneys from donors 70 years of age or older — with the kidneys having been histologically evaluated before implantation — with the

graft outcome among 67 recipients of kidneys from donors 60 to 69 years of age. Patients provided written informed consent to undergo renal transplantation and to participate in the program, which was approved by the institutional review committee at each participating center. Histologic changes in the vessels, glomeruli, tubules, and connective tissue in biopsy specimens obtained from the donor kidneys before transplantation were scored on a scale from 0 (no changes) to 3 (severe changes). When both donor kidneys had a score from 0 to 3, the two kidneys were used for two single transplants. When one kidney had a score from 0 to 3 and the other kidney had a score of 4 or more, and when both kidneys had a score from 4 to 6, the two kidneys were transplanted together into the same recipient. If one kidney had a score from 4 to 6 and the other kidney had a score of 7 or greater, the two kidneys were discarded.^{3,4} Recorded data were analyzed with the use of SAS software, version 9.1 (SAS Institute), at the Clinical Research Center for Rare Diseases, Aldo and Cele Daccò, Ranica, Italy.

Recipients of grafts from donors 70 years of age or older were significantly older, had significantly



more HLA mismatches, spent a shorter time on the waiting list, and were more frequently assigned to dual transplantation than recipients of grafts from donors 60 to 69 years of age (78% of patients vs. 28%, $P < 0.001$). Other characteristics in the two groups were similar. Over a median period of 24 months (interquartile range, 15 to 24), five patients in the group receiving transplants from donors 70 years of age or older (7%) and six patients in the group receiving transplants from younger donors (9%) either had disease progression requiring dialysis or died (Fig. 1). Outcomes were similar, even after adjustment for prespecified characteristics (type of transplantation, donor sex and creatinine clearance, recipient sex and age, ratio of the donor's body-mass index to that of the recipient, and number of HLA mismatches). Rates of patient survival, graft survival (in an analysis in which data were censored for patients who died), recovery of renal function, proteinuria, and adverse events were also similar.

In this study, selection and allocation of kidneys for single or dual transplantation on the basis of biopsy results improved the survival of grafts from very old donors. With this approach, selection criteria might be extended to increase the number of available transplants without increasing the risk of premature graft failure among recipients of kidneys from older donors.

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Effectiveness of One Dose of SA 14-14-2 Vaccine against Japanese Encephalitis

TO THE EDITOR: Japanese encephalitis remains a major cause of viral encephalitis in Asia, imposing a significant burden on poor rural families. Vaccination is an important element of disease control. Japanese encephalitis is endemic in the eastern districts of Uttar Pradesh, and these districts had a severe epidemic of the illness in 2005,¹ after which a decision was made to import the Chinese live attenuated vaccine (SA 14-14-2 strain). Since 2006, summer campaigns for mass vaccination against Japanese encephalitis have been conducted among children 1 to 15 years of age in selected districts of the state. The 2007 cycle covered several districts in the catchment area of our hospital.

We studied the efficacy of a single dose of this vaccine within 6 months after its administration in India, using a case-control design similar to

that described in previously published studies.^{2,3} Our study was approved by the university's institutional review board. Informed consent was received from the parents of the patients.

Children admitted to our hospital with an illness that was consistent with encephalitis were tested for Japanese encephalitis IgM antibodies in serum or cerebrospinal fluid by means of commercial IgM antibody-capture enzyme-linked immunosorbent assay kits (Excyton).⁴ In villages where the campaign for vaccination against Japanese encephalitis had been held in the summer of 2007, children with laboratory tests that were positive for Japanese encephalitis virus were evaluated. A history of vaccination was elicited, and investigators asked for a vaccination card. After the Japanese encephalitis season, trained investigators