

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

Table 1. Efficacy of the SA 14-14-2 Vaccine against Japanese Encephalitis.

Group	Case Patients (N=20) <i>no. (%)</i>	Controls (N=429) <i>no. (%)</i>	Exact Odds Ratio (95% CI)	Vaccine Efficacy (95% CI)* %
Vaccinated subjects	4 (20)	339 (79.0)	0.055 (0.012–0.184)	94.5 (81.5–98.9)
Unvaccinated subjects	16 (80)	90 (21.0)		

* The vaccine efficacy was estimated as 1 minus the odds ratio.

visited the villages of patients. Parents of available age- and sex-matched controls living in the same neighborhood were interviewed regarding a history of vaccination.

Twenty patients with Japanese encephalitis were identified, of whom 4 had been vaccinated. Cerebrospinal fluid from 15 of the 20 patients, including all 4 vaccinated patients, was positive for IgM antibodies against Japanese encephalitis. A vaccination card was available for all four vaccinated patients. Of a total of 441 controls, the vaccination status could be confirmed in 429. Of these controls, 339 (79.0%) had been vaccinated, and 90 had not been vaccinated. The campaign-style vaccination program was easily recalled. The crude odds ratio for disease among vaccinated children was 0.07 (95% confidence interval [CI], 0.02 to 0.22), the exact odds ratio was 0.055 (95% CI, 0.012 to 0.184), and the vaccine efficacy was 94.5% (95% CI, 81.5 to 98.9) (Table 1). The efficacy of a single dose of the SA14-14-2 vaccine for the prevention of Japanese encephalitis for 6 months after vac-

ination in Uttar Pradesh is consistent with the efficacy reported in previous studies in Nepal.^{2,3}

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