

Letters to the Editor

	>48 Hrs. (11 cases)	<48 Hrs. (408 cases)	Statistical Significance
% with acute tubular necrosis	54.5 ± 15.0	17.5 ± 1.9	p = 0.014*
Graft survival at 1 yr. (%)	73 ± 13	73 ± 2	None†
Mean serum creatinine at 1 yr. (mg./dl.)	1.17 ± 0.44	1.63 ± 1.57	None†
Mean blood pressure at 1 yr.:			
Systolic (mm. Hg)	151 ± 36	141 ± 20	None†
Diastolic (mm. Hg)	91 ± 17	92 ± 13	None†

* Fisher's exact test.

† Student's t test.

of this article, that kidneys preserved by cold storage should not be discarded because of arbitrary time limits on cold ischemia. In addition, we recommend maximal hydration of the recipient to minimize acute tubular necrosis risk.

Respectfully,
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RE: SUCCESSFUL HUMAN KIDNEY PRESERVATION BY INTRACELLULAR ELECTROLYTE FLUSH FOLLOWED BY COLD STORAGE FOR MORE THAN 48 HOURS

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J. Urol., 129: 473-474, 1983

To the Editor. These authors report that the fate of 7 kidneys preserved by intracellular electrolyte solution followed by cold storage for 48 to 61 hours was as good as that of 63 kidneys similarly preserved for <24 hours, despite a higher incidence of acute tubular necrosis in the former group (86 versus 30 per cent). Our experience confirms these observations.

Among 419 primary cadaver kidneys transplanted in our center between October 1976 and October 1982, 11 had been preserved for 48 to 60 hours (mean ± standard deviation 51 ± 4) with Euro-Collins' solution. All of these grafts were dispatched by the Eurotransplant Organization based upon HLA-A, HLA-B and, more recently, Dr-matching. All recipients received at least 3 units of blood before transplantation and 6 of 11 were sensitized to a lymphocyte panel. The postoperative regimen included conventional immunosuppression and prophylactic antilymphocytic or antithymocyte globulin therapy. As shown in the table, actuarial graft survival, mean serum creatinine and mean blood pressure at 1 year are similar, whether the cold ischemia time was ± 48 hours.

As these authors, we found a higher incidence of acute tubular necrosis (defined as an immediate postoperative temporary graft failure requiring dialysis in the absence of rejection) among grafts preserved >48 hours. However, it is noteworthy that the absolute incidence of acute tubular necrosis in our series is lower than that reported in this article. In the group of kidneys preserved <48 hours the incidence of acute tubular necrosis was only 17.5 ± 1.9 per cent, for a mean total ischemia time of 31 ± 8 hours, whereas Barry and associates reported an incidence of 30 per cent for grafts stored <24 hours. The same trend is found for kidneys preserved >48 hours, with an incidence of 54.5 per cent in our center versus 86 per cent reported by these authors. The lower incidence of acute tubular necrosis in our center is probably owing to our policy of maximal hydration of the recipient during anesthesia.^{1,2} Therefore, our study is in agreement with the conclusion

1. Carlier, M., Squifflet, J.-P., Pirson, Y., Gribomont, B. and Alexandre, G. P. J.: Maximal hydration during anesthesia increases pulmonary arterial pressures and improves early function of human renal transplants. *Transplantation*, 34: 201, 1982.
2. Carlier, M., Squifflet, J.-P., Pirson, Y., Decocq, L., Gribomont, B. and Alexandre, G. P. J.: Confirmation of the crucial role of the recipient's maximal hydration on early diuresis of human cadaver renal allograft. *Transplantation*, in press.