

Cadaver Donor Renal Transplantation by Centers of the South-Eastern Organ Procurement Foundation

The Prospective Study After 6.5 Years and 3811 Allografts

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After 6.5 years, the SEOPF prospective study of 3811 cadaver grafts is summarized. The prime variables of transfusions, homologous leucocytic antibodies (HLA)-A and B typing and anti-lymphocyte serum treatment, continue to beneficially affect survival, but trends in the data suggest that they either have small or short-term effects. Apparently the determinants of true long-term survival are still not uncovered. Any erythrocyte preparation provides the transfusion effect if administered more than 10 days and less than 365 days before transplantation. Dialysis in the first week after transplantation adversely affects graft survival. Splenectomy may improve graft survival, but increases patient mortality. Thus, we believe it is unwarranted as a routine measure. We continue to collect long-term data on this group of patients, which will probably stand as a benchmark study of precyclosporin renal transplantation.

THE SOUTH-EASTERN ORGAN Procurement Foundation (SEOPF), which is a collaborative group of 42 centers of transplantation, initiated a prospective study of renal transplants from cadaver donors on June 1, 1977. Accrual of cases ceased after 5 years on June 1, 1982. There are 3811 transplants in the database. The volume of data is now enormous and includes over seven million data elements. An analysis of the data, after the first 2.5 years, was presented in 1981.¹ Several other publications have appeared that have focused upon particular aspects of the study.²⁻¹⁰ Although we expect to follow these patients for several more years, this paper provides an overview of the data after 6.5 years.

Methods and Materials

The general structure of the study, the timing and methods of data acquisition, and the SEOPF policies

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relative to organ sharing, including compatibility testing and organ preservation techniques, have been described.^{1,11,12}

Data Verification

In 1983 a study was performed to verify the data bank. There were 6322 sets of data acquisition forms on file. A random sample of 160 hard-copy forms were compared with the computer data to test the accuracy of data entry. A total of 178,688 data elements were checked and 96 errors were detected. This yielded an error rate of 0.0005. Another 130 hard-copy forms were compared with the original medical records to verify the accuracy of data acquisition. A total of 129,710 data elements were checked and 468 errors were detected. Thus, the error rate of data acquisition was 0.0036.

Statistical Analysis

Data were analyzed by life-table techniques to obtain patient and graft survival curves. Probability of difference between curves were calculated by both the Breslow (generalized Wilcoxon) method and the Mantel-Cox (Savage) method.^{13,14} The former allows more weight to early differences, while the latter allows more weight to