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Post-Congress Workshops on Organ Preservation and Immunosuppression

Great Barrier Reef, North Queensland. August 22-25, 1988.

ASSOCIATED MEETINGS

Rat Genetics

Fiji. August 6-13, 1988. Contact person—Professor B. Heslop, Department of Surgery, Medical School, Otago University, Dunedin, New Zealand.

Retrovirally Mediated Gene Transfer Workshop

Sydney. August 10-12, 1988. Contact: Dr G. Symonds, Childrens Medical Research Foundation, PO Box 61, Camperdown, NSW, 2050, Australia.

Australasian and South East Asian Tissue Typing Association

Canberra, ACT, August 20-21, 1988. Contact: Dr S.W. Serjeantson, Department of Human Genetics, John Curtin School of Medical Research, Australian National University, ACT, 2601, Australia.

GENERAL INFORMATION

Congress Venue

The Convention Centre, Darling Harbour, Sydney.

Registration

Registration documents and abstract submission forms will be SENT to ALL MEMBERS of the Transplantation Society in September, 1987. Deadline for submission of abstracts is January 15, 1988.

NON-MEMBERS are WELCOME. Please contact the Registration and Accommodation address below for registration documents and abstract forms.

Addresses

Scientific Programme. Abstracts.
XII International Congress Secretariat
145 Macquarie St, Sydney
NSW, 2000, Australia.
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International (612) 27 4461
FAX (02) 231 3120

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Victoria, 3104, Australia.
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(ME 2626)

Recent Improvement in Clinical Pancreas Transplantation

W-D. Illner, S. Schleibner, D. Abendroth, R. Landgraf, and W. Land

AT THE PRESENT TIME, there are promising and encouraging data indicating that successful human pancreas transplantation has a beneficial effect on the diabetic microangiopathic lesions found in organs like the kidney, eye, and nervous system.[1,2] In Autumn 1984, some modifications in the management of this type of organ transplantation have been introduced by our group, which have led to improved results. They are briefly mentioned in this report.

PATIENTS AND METHODS

This paper presents the experience with a subgroup of 25 simultaneous pancreas and kidney transplanted diabetic patients out of a total of 71 pancreas transplantations. One of those patients was retransplanted. The time of follow-up lasted from September 1984 up to March 1987. All patients received a segmental allograft and a kidney from the same donor.

Recipient Selection Criteria

The mean age of the recipients was 30 years (12 females, 13 males). Only one recipient had diabetic nephropathy without dialysis treatment. All patients were suffering from severe stage II and III retinopathy and mild to severe peripheral neuropathy. In all recipients we performed a coronary angiography.

Surgical Technique

We used the duct occlusion technique with prolamine. The pancreatic allograft was placed strictly intraperitoneally, and the abdominal cavity was irrigated for about 3 days to eliminate the transient residual exocrine secretion.

From the Division of Transplant Surgery, Department of Surgery, Klinikum Grosshadern, Department of Internal Medicine "Innenstadt," University of Munich.

Address reprint requests to Dr. WD Illner, Division of Transplant Surgery, Klinikum Grosshadern, Marchioninistr. 15, 8000 München 70, FRG.

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Immunosuppressive Protocol

We started with a quadruple drug induction therapy consisting of:

1. *Cyclosporine IV:* 1 mg/kg body weight (B.W.) by 24-hour infusion (blood levels: 100-350 ng/ml); → switch to oral application (~10 mg/kg B.W.) (blood levels: 300-800 ng/ml)
2. *Azathioprine:* 2-1 mg/kg B.W. daily
3. *ATG, (ALG):* 4 mg/kg (20 mg/kg) B.W. for 10 days
4. *Steroids:* (methylprednisolone) 500 mg intraoperatively, reduced to maintenance dose of 30 mg daily

Triple drug therapy, that is, cyclosporine, azathioprine, and steroids was given for a period of 6 months. The maintenance therapy consists of cyclosporine and azathioprine for life.

Anticoagulation Protocol

Because of the high incidence of heparin-induced bleedings posttransplant, we changed our anticoagulation therapy and applicated a combination of Rheomacrodex (Dextran 40, Knoll) and smaller amounts of heparin:

- Rheomacrodex (Knoll) plus 200-400 I.U. heparin/hour for 3 weeks, partial thromboplastin time of 40 seconds (PTT: 40")
- "Low dose" heparin for a period of 6 weeks posttransplant.

RESULTS

Pancreas and kidney survival rates were 74% and 71%, respectively (Fig 1). The patient survival rate was 100% (Fig 2). A fatal cause was observed in a 54-year-old male dying 9 months after simultaneous grafting with a functioning kidney. In this patient, death was the consequence of diabetic complications and not caused by the transplantation itself. If we take this patient into account, the survival rate is 93%.

CONCLUSION

With a modified surgical technique, immunosuppressive therapy, and anticoagulation,

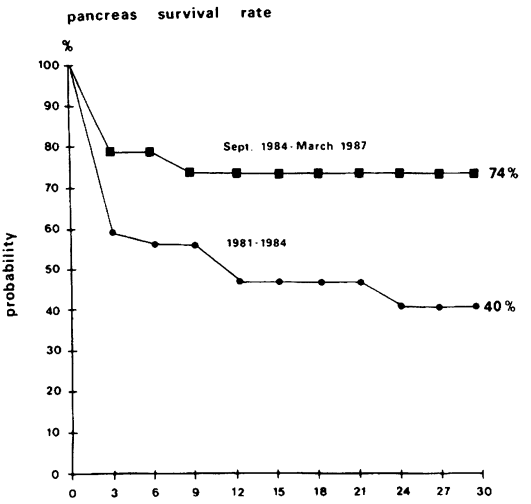

Fig 1. Pancreas survival rate in simultaneous pancreas and kidney transplantation according to different periods, using some modifications since September 1984 (Cutler/Ederer-formula).

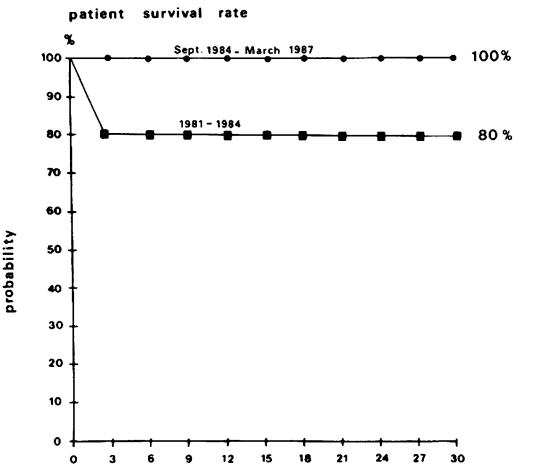

Fig 2. Patient survival rate in combined pancreas and kidney transplantation in the period 1981-1984 and in the period from September 1984 up to March 1987 (Cutler/Ederer-formula). Since September 1984 some modifications were used.

we improved our results in combined pancreas and kidney transplantation. Mortality and morbidity, particularly postoperative complications in this group, have been reduced remarkably.

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2. Bohman S-O, Wilczek H, Tyden G, et al: Transplant Proc 19:2290, 1987