Complications of the Early Post-operative Period in Cadaver Kidney Transplantation

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The results of kidney transplantation depend very much on the prophylaxis and successful treatment of complications in the early post-operative period. Such complications include rejection, pyelonephritis, pneumonia, sepsis wound suppuration and acute renal failure in the transplanted kidney. The outcome of these complications determines the fate of the patient.

Donor selection by leucocyte antigens and the use of antilymphocyte serum notably blunts the severity of the rejection. The early symptoms of a rejection crisis might be a rise in arterial blood pressure, temperature, lymphocyturia, leucocytosis, or a fall in the clearance of endogenous creatinine.

The shortest possible warm ischaemia time (15-20 minutes) leads, as a rule, to a diuresis in the first day after the operation, avoiding further haemodialysis.

An important role in the prophylaxis of infective complications is the restoration of the deficit in balance of irreplaceable amino acids to normal. Measurements of the amino acid concentrations in serum from dialysed patients showed a considerable fall of amino nitrogen level. Our data are comparable to those reported by Bergström et al, (1971).

On admission to the clinic the amino acid and protein concentrations of serum in 63 patients with terminal chronic renal failure were measured. The results suggested a marked impairment of protein metabolism, which was further aggravated when large amounts of amino acids were removed during regular haemodialysis treatment. The number of infective complications was considerably reduced after systematic administration of the amino acid mixtures Moriamin, Aminocrovin, and Aminopeptid.

*This paper was given instead of the paper 'Some Aspects of Kidney Transplantation' by B V Petrovsky, V I Shumakov, I S Yarmolinsky and E R Levitsky which appeared in the Abstracts.
The optimum venous anastomosis for blood flow-out of the transplant, and the antireflux method of ureteroneocystostomy are of great importance in the prophylaxis of pyelonephritis in the transplanted kidney. Routine use of broad spectrum antibiotics and of uroantiseptics are of great use. In temporary failure of function in the allograft, haemodialysis should be used once every two days and not less frequently in order to correct the disorders of water and electrolyte metabolism, and azotaemia.

REFERENCE

OPEN DISCUSSION
P MICHELSSEN (Louvain, Chairman): Could I ask you, Dr Kutchinski, what kind of diet is given to the patients during chronic haemodialysis prior to transplantation? I am especially interested in the amount of protein given to the patients because you showed us that if you gave amino acids to the patients immediately after transplantation, you could decrease the incidence of infectious complications.

KUTCHINSKI: 60 g/day of protein

MICHELSSEN: I think you spoke about the use of prophylactic antibiotics after transplantation. Are you giving these routinely? Have you any data suggesting that this is better than restricting the use of antibiotics until there is an infection?

KUTCHINSKI: Despite our use of antibiotics and amino acids we had on about four occasions terrible infections, about which we could do nothing.

R SELLS (Liverpool): I would be interested to know the results of cadaveric transplantation in the USSR at one and two years after transplantation.

KUTCHINSKI: After one year 50% are alive, and after two years only 30%; that is the total patient survival.

K KOPP (Salt Lake City): Did you ever have any problems due to lymph collection around the graft and if so, what did you do about it?

KUTCHINSKI: No, I did not.