Very occasionally patients with cytomegalovirus disease have more marked symptoms. Jaundice,[6] pneumonia, encephalitis, and exudative tonsillitis have been described.[3] But a Paul-Bunnell-negative syndrome like infectious mononucleosis with fever is much the commonest picture. It is scarcely possible to trace the source of infection. Contact with another febrile patient in the family, or with newborn babies is sometimes reported,[3] and the disease should certainly be suspected when patients have an unexplained febrile illness after blood transfusion[7 8] or open-heart[9] or transplant surgery.[10] Such patients are usually debilitated and some are being treated with immunosuppressive drugs. A latent cytomegalovirus infection might flare up under those conditions. The alternative, that the virus is conveyed in the blood or the transplant from the donor to the recipient, must be regarded as a possible hazard of these operations. Cytomegalovirus infection is usually silent, but in severe disease of the newborn or unexplained pyrexia in adults it should be considered in the differential diagnosis.

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Selection in Maintenance Haemodialysis

Though it is 11 years since B. H. Scribner's original patient with terminal renal failure started his long-term dialysis odyssey,[1] the dilemma of who shall live and who shall die is as poignant as ever. The need to choose which patients are to die from terminal renal failure is because treatment facilities are insufficient owing to shortages of staff and money.[2] Over six years ago home dialysis was introduced as an economic necessity in order to enable more patients to benefit from treatment.[3] In spite of its remarkable success, less than 30% of the population, or 2,000 new patients each year,[4] requiring treatment in the United Kingdom have a chance of receiving it. Elsewhere in the world facilities are no better and in many areas are worse. Consequently some form of patient selection is practised.

A phrase often used in selection is "medically suitable." The criteria of suitability have recently been defined by E. Reisin and co-workers[5] from retrospective analysis of survival. Suitable patients were defined as below 50 years of age, suffering from terminal renal failure due to primary renal disease, free from other systemic diseases, co-operative and emotionally stable, and without long-standing hypertension, heart failure, coronary-artery, cerebrovascular, or peripheral vascular disease, or clinically evident polyneuropathy. In a series of 30 patients treated for up to four years only one out of seven unsuitable patients survived two years, whereas out of 19 suitable patients who received treatment for 15 to 20 months only two died. However, only two survived for over 26 months. The authors concluded that medical selection is necessary to obtain the greatest benefit from this scarce form of therapy.

But these conclusions would not be generally accepted in the United Kingdom and the U.S.A. For instance, outstanding results were achieved by J. F. Moorehead and colleagues,[6] who reported an 86% four-year survival without any medical selection. S. L. Cohen and co-workers[7] have reported no difference in survival in their patients aged over 50 compared with younger patients, and E. J. Lewis and colleagues confirmed this in a larger series.[8] J. S. Cameron and colleagues[9] have reported that children do better on long-term dialysis than adults, and S. Shaldon and his colleagues[10] have been shown that home dialysis in children produces equivalent results to those in adults. It would appear that in centres achieving the best periods of survival age is no longer a criterion for medical selection. Furthermore, the average results reported in the 1970 European dialysis and transplant survey[11] show 63% surviving for three years.

The major causes of death have been sepsis associated with shunt infections, heart failure, and uncontrolled hypertension and hyperkalaemia. Shunt sepsis can now be eliminated with the use of the arteriovenous fistula,[12] and the latter two causes can be controlled with more frequent dialysis—namely, three times a week instead of twice. The results obtained by Moorehead and colleagues, largely in home dialysis patients, were based on dialysis three times a week. It is usual for patients on home dialysis to have it that frequently, whereas for hospital dialysis twice-weekly treatment is commoner. Other factors favourable to home dialysis are the reduced risks of cross-infection and hepatitis.

The better survival and economic benefits indicate that most maintenance dialysis should be done in the home. Unfortunately not all patients are suitable for home dialysis, and it has been suggested that it is not ethical to select patients only on the grounds of suitability for dialysis at home.[13] On economic grounds this argument cannot be sustained, for as long as selection has to be practised it may well be argued, if age and disease status are no longer criteria, that the utilization of limited facilities for the greatest cost-effectiveness is the best determinant. On these grounds permanent maintenance dialysis in a hospital centre would not win support. The alternative for patients unsuitable for home dialysis appears to be transplantation, though the survival results of cadaver transplantation are still inferior to those of maintenance haemodialysis.[11] Despite the progress made in the past 10 years and the millions of pounds spent on maintenance haemodialysis, selection for this form of treatment will remain a doctor's dilemma for many years to come.

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