

The STEPP programme to study transplant outcomes

Renal transplantation is an increasingly successful therapy, as judged by progressive improvements in patient and graft survival over the last 25 years. Transplant registries have provided invaluable information on large patient cohorts.

The importance of early graft function on patient survival has been established^{1,2} and death after graft loss has been associated with prolonged waiting time on dialysis, diabetes mellitus and acute rejection.² The impact of post-transplant diabetes³ and obesity⁴ is emerging, as is the importance of addressing cardiovascular risk factors.⁵ However, while the number of patients in registries is large, further analysis of this type of data is limited because only major events and numerical data are commonly recorded. More subtle factors, such as the impact of opportunistic infection on morbidity and mortality, are not available to allow a more detailed analysis.

Other studies

Most other studies have focused on the transplant itself, collecting information prospectively from the day of transplantation and concentrating on transplant-related parameters that influence graft survival. Graft failure and death with a functioning graft are the usual endpoints of analysis, and second and subsequent transplants are usually regarded as separate episodes. However, the crucial issue of the impact of unsuccessful transplantation on long-term outcome is poorly investigated, as is the continuing burden of co-morbidity before, during and after transplantation. The complex interactions of multiple immunosuppressive agents and other medications have not been well analysed. Finally, quality of life or quality of health outcomes analyses typically identify transplantation as superior to dialysis, but studies with the power to investigate the influence of a wide range of co-morbidity and transplant-related variables are lacking.

A long-term collaborative study

To address some of these questions, work will begin shortly on a three-year, long-term collaborative study of transplant outcomes in the UK. The STEPP programme, led by The National Kidney Research Fund, brings the resources of three of the UK's leading transplant companies – Astellas (formerly Yamanouchi and Fujisawa), Roche and

Wyeth – together with the expertise of The Renal Association and the British Transplantation Society. Data will be collected retrospectively from 3,000 patients who received a renal transplant between 1994 and 2004. This will take place in five major centres, in collaboration with the Department of Epidemiology at the University of Leicester and the Department of Health Psychology at the Royal Holloway College, London University.

Crucially, data collection will be continued after transplant failure and will include subsequent dialysis and re-transplantation. In all living patients, quality of life and other patient-reported data will be collected prospectively by questionnaire and responses compared between those with functioning grafts, those returned to dialysis and those re-transplanted. The depth of data available will allow detailed analysis of many factors, especially patient-reported measures of the outcome in a renal transplant recipient. Therefore, the project will use IT-based solutions to ensure better management of patient information, promote evidence-based decision-making and improve the health and wellbeing of patients.

For further information about the programme, contact Elaine Davies, Grants Manager, The National Kidney Research Fund, on: 01733 704658, or email: elainedavies@nkrf.org.uk ■

References

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Key points

- Analysis of data collected in renal registries is limited because only major events and numerical data are commonly recorded.
- The STEPP programme is a three-year, long-term collaborative study of transplant outcomes in the UK, which aims to overcome these limitations.