

standardization of evaluation, organ allocation and donor follow-up.

**Original article** Mark PJ *et al.* (2006) Experience with an organ procurement organization-based non-directed living kidney donation programme. *Clin Transplant* 20: 427–437

## Blood pressure is increased in living kidney donors

A recently reported meta-analysis investigated whether normotensive adults who donate a kidney are at greater risk of hypertension than healthy non-donors.

The authors used MEDLINE, EMBASE and the Science Citation Index to identify studies published from 1966 to 2005 that included at least 10 healthy normotensive adults who had donated a kidney and had had their blood pressure measured at least 1 year afterwards. They selected 48 studies that followed a total of 5,145 kidney donors for an average of 7 years after donation (range 1–25 years). Pooled results from 10 studies that included data on non-donor control participants showed that, approximately 10 years after transplant surgery, blood pressure was about 5 mmHg higher (6 mmHg systolic, 4 mmHg diastolic) in donors than in control participants. One of six controlled studies assessing risk of hypertension after kidney donation found the risk to be increased in donors compared with control participants (relative risk 1.9); there was statistical heterogeneity between the six studies, however, so results were not pooled. Among the donor cohorts, predonation features associated with larger increases in blood pressure, higher blood pressure, or hypertension after donation included older age, male sex, higher blood pressure, greater than ideal body weight, and lower glomerular filtration rate.

The authors conclude that within 5–10 years of donation, living kidney donors might have a 5 mmHg higher increase in blood pressure than would occur as a result of normal aging. Prospective, controlled studies to better estimate long-term risks are needed, to improve donor selection, informed consent, and best practices that maintain the wellbeing of previous and future donors.

**Original article** Boudville N *et al.* (2006) Meta-analysis: risk for hypertension in living kidney donors. *Ann Intern Med* 145: 185–196

## Diabetes mellitus increases the risk of infection following renal transplantation

Graft survival is worse in patients who develop post-kidney-transplantation diabetes mellitus (post-TDM) than in patients without diabetes mellitus (DM). Few studies, however, have investigated whether the risk of post-transplantation infection is higher in patients with DM. Lansang *et al.* have therefore investigated whether there is a relationship between DM and the risk of infection requiring hospitalization following a kidney transplant.

This study used data from 29,966 kidney transplant recipients included in the US Renal Data System. Patients were classified as non-DM (43%), pre-TDM (if DM was diagnosed before, or at the time of, hospitalization for transplantation; 42%) or post-TDM (15%). Patients with pre-TDM had a 43% higher risk of developing a post-transplantation infection requiring hospitalization than those without DM at the time of transplantation. Post-TDM patients showed a 77% higher risk of developing a post-transplantation infection requiring hospitalization than non-DM patients. The majority of infections were caused by bacteria, with septicemia being the most common type of bacterial infection.

This study supports the idea that DM is associated with worse clinical outcomes after transplantation, and, although a causal link was not established, the findings indicate that greater attention should be given to the management of pre-TDM and post-TDM.

**Original article** Lansang MC *et al.* (2006) The relationship between diabetes and infectious hospitalizations in renal transplant recipients. *Diabetes Care* 29: 1659–1660

## Safety of cardiac surgery in kidney transplant recipients

Compared with the general population, kidney transplant recipients have an increased risk of cardiovascular disease. Cardiac surgery can be beneficial, but problems with wound healing, infection and graft failure can occur. To evaluate the risks and benefits of cardiac surgery in graft recipients, Deb *et al.* assessed the outcome of procedures such as coronary artery bypass grafting and valve replacement in a cohort of liver and kidney recipients.