

REPORT SUMMARY

1. BLOOD AND MARROW TRANSPLANTATION

There was a total of 1048 haematopoietic stem cell transplantations reported to the Registry between 1987 and 2005; of which 699 recipients were alive at the end of 2005.

The majority of all transplants (72%) were for malignant disorders and most of these are haematological malignancies like leukaemia and lymphoma. The main non-malignant disorders transplanted were thalassaemia and aplastic anaemia.

There were 145 new transplantations done in the 9 transplant units in Malaysia in 2005.

Mean age of new transplant patients in 2005 was 26 ± 16 years; 48% were male, 46% Chinese. Autologous transplants accounted for 39%. Seventy-nine percent of the transplant sources were from peripheral blood stem cells and 94% were from HLA identical donors.

In 2005, 36 patients died. Underlying disease, infection and GVHD were the commonest causes of death accounting for 39%, 25% and 17% respectively.

2. CORNEAL TRANSPLANTATION

There were 46 centres which agreed to provide cornea transplantation data.

One hundred and ninety-two new cornea transplantations were reported in Malaysia in 2005. Mean age of new transplant recipients in 2005 was 46 ± 21 years. Of these, 59% were male, 32% of recipients were Malay, 38% Chinese, 21% Indian and 9% other races.

The primary diagnoses for cornea transplantation recipients in 2005 were cornea perforation (19%), keratoconus (18%), pseudophakic bullous keratopathy (18%), microbial keratitis (17%), cornea scars (10%), other (non-pseudophakic) bullous keratopathy (7%), and failed previous cornea grafts (7%).

Seventy-six percent recipients were legally blind before their transplant surgery.

In 2005, 71% of donated corneas were from the USA, 17% from Sri Lanka and 12% from local sources. The mean age of the donors was 57 ± 14 years.

The commonest cornea transplantation surgery performed was penetrating keratoplasty (90%) i.e. transplantation of a full thickness cornea tissue. Eighty-two percent (150/184) of recipients from 2004 had follow-up data at one year. Overall graft survival was 80% at one year.

3. HEART TRANSPLANTATION

There were a total of 16 heart transplantations reported to the Registry between 1997 and 2005.

There were only 1 heart transplant and 1 lung transplant performed in 2005. The lung transplant was a single lung transplant. 7 heart grafts were functioning at the end of 2005 and all were followed up in Institut Jantung Negara.

Two thirds of the recipients were males and over half were Indians. The mean age of recipients was 36 ± 16 years. Ischaemic cardiomyopathy was the commonest primary diagnosis (8/15) followed by dilated cardiomyopathy (6/15).

Five recipients died in hospital following transplantation; four patients succumbed to late deaths after their heart transplant.

The transplant patient survival rate was 60% and 40% at 1 year and 3 years respectively.

4. LIVER TRANSPLANTATION

There were a total of 80 liver transplantations reported to the Registry between 1993 and 2005; 45 grafts were functioning at the end of 2005.

There were 5 new liver transplantations done in Malaysia in 2005.

There were 4 centres of follow-up for liver transplant recipients in 2005.

Mean age of all transplant patients was 7 ± 13 years (range 3 months to 74 years); 55% were male, 51% Chinese, 76% were for biliary atresia. A majority was living donor liver transplantations (84%).

At the time of transplantation the main immunosuppressive drugs used were tacrolimus (76%) and steroids (55%).

Transplant patient survival rate for the cohort 1993 to 1998 was 71% at 1 year; survival rate for the cohort 1999 to 2005 was 66% at 1 year.

5. RENAL TRANSPLANTATION

There were 67 centres of follow-up for renal transplant recipients in 2005. Incident rates for renal transplantation were static, from 7 per million population in 1996 to 6 per million in 2005. There were 155 new renal transplants in 2005.

The number of functioning renal transplants has increased steadily from 1023 in 1996 to 1681. The transplant prevalence rate was 69 per million population in 2005.

In 2005, the mean age for new transplant recipients was 38 ± 14 years, 70% were male and 19% had diabetes at the time of transplantation.

Ninety-nine percent of prevalent renal transplant recipients were on prednisolone, 78% cyclosporine, 14% tacrolimus, 44% mycophenolate mofetil and 39% azathioprine.

In 2005, 38 (2%) of prevalent transplant recipients died and 15 (1%) lost their grafts. Infection and cardiovascular disease were the commonest causes of death accounting for 42% and 11% respectively. Death at home was the third commonest cause at 11%. Renal allograft rejection accounted for 78% of graft loss.

The overall transplant patient survival rate from 1993 to 2005 was 95%, 92%, 89% and 81% at 1 year, 3 years, 5 years and 10 years respectively, while the overall graft survival rate was 92%, 85%, 79% and 63% respectively.

6. HEART VALVE TRANSPLANTATION

There were a total of 163 heart valve homografts reported to the Registry between 1996 and 2005; 144 grafts were functioning at the end of 2005. Eighty-two were aortic and 81 were pulmonary valves.

Mean age of all heart valve transplant patients was 11 ± 11 years (range 3 months to 70 years); 50% were male, 61% Malay.

7. BONE AND TISSUE TRANSPLANTATION

In 2005, 131 bone allografts and 64 amniotic membranes were supplied by National Tissue Bank, USM.

Twenty-one hospitals used the bone grafts and 16 centres used the amniotic membranes.

8. CADAVERIC ORGAN AND TISSUE DONATION

There were 13 donors in 2005 of which 5 were brain dead multi-organ and tissue donors and 8 were post cardiac death tissue donors. The rate is 0.53 donations per million population. The first lung donor for lung transplantation occurred in December 2005.

The mean age of the donors was 46.4 ± 24.8 years. The youngest was a Malay three year old child who donated liver, kidneys, heart valves and eyes, the oldest was an 81 year old eye donor. All the donors were Malaysians, of whom 7 were Indians, 5 Chinese and 1 Malay. Seven donors were from Selangor. There were more male donors than female (62% versus 38 %).

Three donors carried the donor pledge card. Nine of the donors died from medical causes, 3 died from road accidents and one homicide. Seven procurements took place in the bigger government hospitals, 5 from private hospitals, 1 from a University Hospital.