

REPORT SUMMARY

1. BLOOD AND MARROW TRANSPLANTATION

There were 262 new transplantations done in Malaysia in 2010 with 11 centres performing transplants.

The majority of transplants were for malignant disorders and most of these are haematological malignancies like leukaemia (42%) and lymphoma (24%). The main non-malignant disorders transplanted were thalassaemia and aplastic anaemia (5% each).

Mean age of new transplant patients in 2010 was 29 ± 11.9 years; 53% were male, 41% Malay, 40% Chinese, 9% Indian and 10% others. Autologous transplants accounted for 48%. Eighty-five percent of the transplant source was from peripheral blood stem cells and 94% were from Human Leukocyte Antigen (HLA) identical donors.

In 2010, 58 of the transplant recipients died. Underlying disease and infection were the commonest causes of death accounting for 52% and 17% respectively.

2. CORNEAL TRANSPLANTATION

There were 9 centres which provided cornea transplantation data.

One hundred and seventy-one new cornea transplantations were reported in Malaysia in 2010. Mean age of new transplant recipients in 2010 was 42 ± 21 years. Of these, 68% were male. Forty percent of recipients were Malay, 28% were Chinese, 13% were Indian and 19% were other races.

The primary diagnoses for cornea transplantation recipients in 2010 were microbial keratitis (28%), corneal perforation (20%), pseudophakic bullous keratopathy (13%), keratoconus (8%), and non pseudophakic bullous keratopathy (6%).

Eighty-three percent of recipients were legally blind before their transplant surgery.

In 2010, 63% of donated corneas were from the USA, 30% from local sources and 6% from Sri Lanka. The mean age of the donors was 53 ± 17 years.

The commonest cornea transplantation surgery performed was penetrating keratoplasty (71%) i.e. transplantation of a full thickness cornea tissue. Graft survival at 1 year was 78%, 67% at 3 years.

3. HEART AND LUNG TRANSPLANTATION

There were a total of 19 patients with heart transplantations reported to the Registry between 1997 and 2010. Eight grafts were functioning at the end of 2010 and all were followed up in Institut Jantung Negara.

The transplant patient survival rate was 65% and 47% at 1 year and 3 years respectively.

There was one lung transplant in 2010. At the end of the year there was a single patient surviving with functioning graft (from a total of 5 done since 2005).

4. LIVER TRANSPLANTATION

There were a total of 113 liver transplantations reported to the Registry between 1993 and 2010; 64 grafts were functioning by the end of 2010.

There were 4 new liver transplantations done in Malaysia in 2010. There were 2 follow-up centres for liver transplant recipients in 2010.

Mean age of all transplant patients was 9.1 ± 13.8 years (range 8.9 months to 74 years); 50% were male, 53% Chinese, 37% Malay, 8% Indian, 68% were for biliary atresia. Majority were living donor liver transplantations (70%).

At the time of transplantation the main immunosuppressive drugs used were tacrolimus (77%) and steroids (63%).

Transplant patient survival rate for the cohort 1993 to 1998 was 71% at 1 year; survival rate for the cohort 1999 to 2010 was 70% at 1 year.

5. RENAL TRANSPLANTATION

There were 47 follow-up centres for renal transplant recipients in 2010. There were 102 new renal transplants in 2010, 4 per million population per year.

The number of functioning renal transplants in 2010 was 1841. The transplant prevalence rate was 65 per million population.

In 2010, the mean age for new transplant recipients was 40 ± 14 years, 63% were male, 12% had diabetes, 2% were anti-HCV positive, 2% were HbsAg positive at the time of transplantation.

Ninety-five percent of prevalent renal transplant recipients were on prednisolone, 61% on cyclosporine, 30% on tacrolimus, 59% mycophenolate mofetil and 27% on azathioprine.

In 2010, 33 (1.8%) of prevalent transplant recipients died and 35 (1.9%) lost their grafts. Infection, cardiovascular causes and died at home were the commonest causes of death accounting for 37%, 18% and 18% respectively. Cancers were the fourth commonest cause at 8%. Renal allograft rejection accounted for 54% of graft loss.

The overall transplant patient survival rate from 2000 to 2010 was 94%, 91%, 87% and 80% at 1 year, 3 years, 5 years and 10 years respectively, while the overall graft survival rate for these years was 93%, 87%, 81% and 68% respectively.

6. HEART VALVE TRANSPLANTATION

There were a total of 260 heart valve homografts reported to the Registry between 1996 and 2010; 223 grafts were functioning at the end of 2010. One hundred and twenty-six were aortic and 134 were pulmonary valves.

Mean age of all heart valve transplant patients was 10.1 ± 9.7 years (range 1 month to 70 years); 51% were male, 65% Malay.

7. BONE AND TISSUE TRANSPLANTATION

In 2010, 96 bone allografts, 8 frozen tendons and 972 amniotic membranes were supplied by Tissue Bank, Universiti Sains Malaysia.

Five hospitals used the bone grafts and 1 centre used the amniotic membranes. Characteristics were reported for only 6 of the recipients.

8. CADAVERIC ORGAN AND TISSUE DONATION

There were 151 referrals for donation with 38 donors in 2010. This translated to a conversion rate of 25%. Eighteen were brain dead multi-organ and tissue donors and 20 were post cardiac death tissue donors. The donation rate was 1.34 donations per million population.

The mean age of the donors was 39.9 ± 16.7 years, age range 12 – 79 years. Sixty-eight percent were male, 68% were Chinese, 26% Indian, 3% Malay.

Seven donors carried the donor pledge card. Twenty of the donors died from accidents, 10 died from medical causes. Almost all donations took place in Ministry of Health hospitals; 2 were from private hospitals.