

REPORT SUMMARY

1. BLOOD AND MARROW TRANSPLANTATION

There were 265 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 lymphoma (37%) and leukemia (30%). The main non-malignant disorders transplanted were thalassaemia (8%) and aplastic anaemia (4%).

Mean age of new transplant patients in 2011 was 32 ± 18 years; 54% were male, 48% Malay, 35% Chinese, 6% Indian and 11% others. Autologous transplants accounted for 54%. Eighty-seven percent of the transplant source was from peripheral blood stem cells and 98% were from Human Leukocyte Antigen (HLA) identical donors.

In 2011, 35 of the transplant recipients died. Underlying disease and infection were the commonest causes of death accounting for 37% and 17% respectively.

2. CORNEAL TRANSPLANTATION

There were 11 centres which provided cornea transplantation data.

One hundred and sixty-two new cornea transplantations were reported in Malaysia in 2011. Mean age of new transplant recipients in 2011 was 41 ± 22 years. Of these, 62% were male. Forty-four percent of recipients were Malay, 24% were Chinese, 21% were Indian and 11% were other races.

The primary diagnoses for cornea transplantation recipients in 2011 were corneal perforation (20%), keratoconus (18%), microbial keratitis (17%) and pseudophakic bullous keratopathy (10%).

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

In 2011, 58% of donated corneas were from the USA, 38% from local sources and 4% from Sri Lanka. The mean age of the donors was 53 ± 19 years.

The commonest cornea transplantation surgery performed was penetrating keratoplasty (72%) i.e. transplantation of a full thickness cornea tissue. Graft survival at 1 year was 80%, 74% at 3 years.

3. HEART AND LUNG TRANSPLANTATION

There were a total of 22 patients with heart transplantations reported to the Registry between 1997 and 2011. Eleven grafts were functioning at the end of 2011 and all were followed up in Institut Jantung Negara.

The transplant patient survival rate was 67% and 50% at 1 year and 3 years respectively.

There were 4 lung transplants in 2011. At the end of the year there were 4 patients surviving with functioning graft (from a total of 9 done since 2005).

4. LIVER TRANSPLANTATION

There were a total of 120 liver transplantations reported to the Registry between 1993 and 2011; 70 grafts were functioning by the end of 2011.

There were 7 new liver transplantations done in Malaysia in 2011. There were 2 follow-up centres for liver transplant recipients in 2011.

Mean age of all transplant patients was 10 ± 14.3 years (range 8.9 months to 74 years); 50% were male, 51% Chinese, 38% Malay, 9% Indian, 65% were for biliary atresia. Majority were living donor liver transplantations (66%).

At the time of transplantation the main immunosuppressive drugs used were tacrolimus (78%) and steroids (64%).

Transplant patient survival rate for the cohort 1997 to 2011 was 70% at 1 year.

5. RENAL TRANSPLANTATION

There were 45 follow-up centres for renal transplant recipients in 2011. There were 112 new renal transplants in 2011, 4 per million population per year.

The number of functioning renal transplants in 2011 was 1884. The transplant prevalence rate was 65 per million population.

In 2011, the mean age for new transplant recipients was 38 ± 14 years, 70% were male, 11% had diabetes, 5% were anti-HCV positive, 5% were HbsAg positive at the time of transplantation.

Ninety-five percent of prevalent renal transplant recipients were on prednisolone, 55% on cyclosporine, 37% on tacrolimus, 66% mycophenolate mofetil and 18% on azathioprine.

In 2011, 38 (2%) of prevalent transplant recipients died and 41 (2.2%) lost their grafts. Infection, cardiovascular causes and died at home were the commonest causes of death accounting for 41%, 18% and 11% respectively. Cancers were the fourth commonest cause at 7%. Renal allograft rejection accounted for 46% of graft loss.

The overall transplant patient survival rate from 2002 to 2011 was 95%, 91%, 88% and 82% at 1 year, 3 years, 5 years and 10 years respectively, while the overall graft survival rate for these years was 93%, 88%, 83% and 68% respectively.

6. HEART VALVE TRANSPLANTATION

There were a total of 274 heart valve homografts reported to the Registry between 1996 and 2011; 224 grafts were functioning at the end of 2011. One hundred and thirty-three were aortic and 141 were pulmonary valves.

Mean age of all heart valve transplant patients was 10.2 ± 9.9 years (range 1 month to 70 years); 52% were male, 65% Malay.

7. BONE AND TISSUE TRANSPLANTATION

In 2011, 50 bone allografts, and 164 amniotic membranes were supplied by Tissue Bank, Universiti Sains Malaysia.

Eleven hospitals used the bone grafts and 8 centres used the amniotic membranes.

8. DECEASED (CADAVERIC) ORGAN AND TISSUE DONATION

There were 174 referrals for donation with 47 donors in 2011. This translated to a conversion rate of 27%. Twenty-four were brain dead multi-organ and tissue donors and 23 were post cardiac death tissue donors. The donation rate was 1.64 donations per million population.

The mean age of the donors was 38.9 ± 21.6 years, age range 2 – 78 years. Seventy-five percent were male, 72% were Chinese, 21% Indian, 2% Malay.

Ten donors carried the donor pledge card. Nineteen of the donors died from accidents, 20 died from medical causes. Almost all donations took place in Ministry of Health hospitals; 3 were from University hospitals and 7 were from private hospitals.