

REPORT SUMMARY

1. BLOOD AND MARROW TRANSPLANTATION

There were 294 new transplantations done in Malaysia in 2012 with 12 centres performing transplants.

The majority of transplants were for malignant disorders and most of these are haematological malignancies like lymphoma (38%), leukemia (32%) and plasma cell disorders (15%). Non-malignant disorders comprised 10% of the total transplants done.

Mean age of new transplant patients in 2012 was 34 ± 17 years; 60% were male, 53% Malay, 32% Chinese, 7% Indian and 7% others. Autologous transplants accounted for 61%. Ninety-two percent of the transplant source was from peripheral blood stem cells and 91% were from Human Leukocyte Antigen (HLA) identical donors.

In 2012, 29 of the transplant recipients died. Underlying disease and infection were the commonest causes of death accounting for 55% and 21% respectively.

2. CORNEAL TRANSPLANTATION

There were 10 centres which provided cornea transplantation data.

Two hundred and thirty-one new cornea transplantations were reported in Malaysia in 2012. Mean age of new transplant recipients in 2012 was 45 ± 21 years. Of these, 63% were male. Forty-four percent of recipients were Malay, 25% were Chinese, 17% were Indian and 14% were other races.

The primary diagnoses for cornea transplantation recipients in 2012 were corneal perforation (18%), microbial keratitis (18%), keratoconus (14%), and pseudophakic bullous keratopathy (12%).

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

In 2012, 64% of donated corneas were from the USA, 30% from local sources and 6% from Sri Lanka. The mean age of the donors was 56 ± 17 years.

The commonest cornea transplantation surgery performed was penetrating keratoplasty (89%) i.e. transplantation of a full thickness cornea tissue. Graft survival at 1 year was 79%, 70% at 3 years and 64% at 5 years.

3. HEART AND LUNG TRANSPLANTATION

There were a total of 22 patients with heart transplantations reported to the Registry between 1997 and 2012. Ten grafts were functioning at the end of 2012 and all were followed up in Institut Jantung Negara.

The transplant patient survival rate was 58% and 52% at 1 year and 3 years respectively.

There were no lung transplants in 2012. At the end of the year there were 3 patients surviving with functioning graft (from a total of 9 done since 2005).

4. LIVER TRANSPLANTATION

There were a total of 127 liver transplantations reported to the Registry between 1993 and 2012; 77 grafts were functioning at the end of 2012.

There were 7 new liver transplantations done in Malaysia in 2012. There were 2 follow-up centres for liver transplant recipients in 2012.

Mean age of all transplant patients was 11 ± 15 years (range 8.9 months to 74 years); 52% were male, 50% Chinese, 37% Malay, 10% Indian, 67% were for biliary atresia. Majority were living donor liver transplantations (62%).

At the time of transplantation the main immunosuppressive drugs used were tacrolimus (80%) and steroids (66%).

Transplant patient survival rate for the cohort 1997 to 2012 was 71% at 1 year.

5. RENAL TRANSPLANTATION

There were 45 follow-up centres for renal transplant recipients in 2012. There were 94 new renal transplants in 2012, 3 per million population per year.

The number of functioning renal transplants in 2012 was 1894. The transplant prevalence rate was 65 per million population.

In 2012, the mean age for new transplant recipients was 37 ± 13 years, 60% were male, 16% had diabetes, 2% were anti-HCV positive, 3% were HbsAg positive at the time of transplantation.

Ninety-five percent of prevalent renal transplant recipients were on prednisolone, 49% on cyclosporine, 40% on tacrolimus, 45% mycophenolic acid and 15% on azathioprine.

In 2012, 45 (2.4%) 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 35%, 22% and 17% respectively. Cancers were the fourth commonest cause at 13%. Renal allograft rejection accounted for 48% of graft loss.

The overall transplant patient survival rate from 1993 to 2012 was 95%, 92%, 88% and 79% at 1 year, 3 years, 5 years and 10 years respectively, while the overall graft survival rate for these years was 92%, 86%, 80% and 65% respectively.

6. HEART VALVE TRANSPLANTATION

There were a total of 292 heart valve homografts reported to the Registry between 1996 and 2012; 250 grafts were functioning at the end of 2012. One hundred and forty-two were aortic and 150 were pulmonary valves.

Mean age of all heart valve transplant patients was 10.2 ± 9.7 years (range 1 month to 70 years); 53% were male, 66% Malay.

7. BONE AND TISSUE TRANSPLANTATION

In 2012, the Bone Bank of Hospital Kuala Lumpur reported receiving 10 femur and 10 tibia. The USM Tissue Bank received 2 femoral heads and 37 amniotic membranes while the UMMC Bone Bank received 12 femoral heads, 2 femurs and 2 tibias.

Eleven hospitals used the bone grafts and 6 centres used the amniotic membranes.

8. DECEASED (CADAVERIC) ORGAN AND TISSUE DONATION

There were 154 referrals for donation with 44 donors in 2012. This translated to a conversion rate of 29%. Eighteen were brain dead multi-organ and tissue donors and 26 were post cardiac death tissue donors. The donation rate was 1.57 donations per million population.

The mean age of the donors was 40.6 ± 19.0 years, age range 8 – 80 years. Seventy-three percent were male, 55% were Chinese, 32% Indian, 7% Malay.

Ten donors carried the donor pledge card. Twenty-three of the donors died from accidents, 21 died from medical causes. Almost all donations took place in Ministry of Health hospitals (37); 2 were from University hospitals and 5 were from private hospitals.