Current global status of liver transplantation: Survival aspects in relation to age, gender and primary diagnosis

Liver transplantation (LT) was developed in 1963. Until 1968 about 10 were performed worldwide with one meaningful survival of 400 days. More LTs were done experimentally. In 1983 it was considered as a treatment option for end stage liver disease. Success of LT doubled after introduction of cyclosporine in early 1980s. With increasing success rate the indications and demand of liver transplant increased exponentially. According to WHO data, until 2010, about 183,193 LTs were performed worldwide. In eastern and middle eastern countries, where brain death criteria were not very well accepted until recently, most LTs were from living donors. In the West majority are from deceased donors (Fig 1).

Perioperative mortality is mostly from infection. Late mortality is related to recurrence of disease (HCV, HBV, HCC, AI, PSC, PBC), de novo cancers non-compliance with anti-rejection medications and age-related issues (CVA, MI, COPD). In long term female gender and children (below age of 18 years) survival are significantly better than male gender and adults. (Fig. 2)

Fig 1: Living vs Deceased Donor Liver Transplantation over the world, the last decade.

Fig 2: Long term patient survival by age, gender and pre transplant diagnosis

Biography

Ashokkumar Jain, with 25 years experience in Liver Transplantation, graduated from T.N. Medical College, Bombay, India. Masters in Surgery from Bombay University. Surgical training, UK. At University of Pittsburg, USA, mentored by Thomas Starzl, who performed first successful human liver transplantation. Faculty at Pittsburg for 14 years, then at University of Rochester. Presently Director, Liver Transplantation, Temple University Hospital, Philadelphia, where he restarted liver transplantation after eight years. Performed over 1,500 transplants, authored over 250 articles, constant invitee in conferences worldwide. Member, journal editorial boards and advisory bodies. Made substantial contributions in immunosuppressant pharmacokinetics. Mentored generations of transplant surgeons.

Ashokkumar.Jain@tuhs.temple.edu