Summary and Conclusion

Liver transplantation is widely accepted as an effective therapeutic modality for a variety of irreversible acute and chronic liver diseases for which no satisfactory therapy is available.

The commonest indications of liver transplantation in infants and children are extra hepatic biliary atresia, metabolic disorders and primary hepatic malignancy, while the commonest indications in adults are primary biliary cirrhosis, chronic active hepatitis and primary malignancy of the liver.

Candidates for liver transplantation must be subjected to strict medical care preoperatively to put the patient in the best possible condition to obtain good result of the procedure.

Although the first attempt at liver transplantation, by Thomas Starzl, dates back to 1963, the true development of this procedure only started in 1984 with the availability of an effective immunosuppressant (cyclosporine). For the first time, acute rejection could be effectively controlled and the 1- year survival was greater than 50%. In these early days, liver transplantation was a formidable procedure, performed by a very limited number of surgeons worldwide, restricted to end-stage liver disease and Patients with a life expectancy measured in weeks, and associated with considerable mortality, morbidity and blood loss. Interestingly, the background of the surgeons who initiated this technique has somewhat different depending on their geographical areas. In Europe, most were surgeons who have significant previous experience with liver surgery. In the USA, on the contrary, most were transplant or vascular surgeons. This difference has had an important impact on how transplant programmes developed, where new techniques were initiated and how technical complications were managed.

Twenty years later, the annual number of liver transplants performed In Europe has increased from 84 in 1980 to 4274 in 1990, and liver transplantation has become available in all Western and most Eastern European countries. The procedure is routine in the most active centers, which occasionally have to perform two procedures in a row.

Improvements in surgical techniques to exploit the segmental anatomy of the liver have provided the surgeons with a variety of possible graft types with which a failing liver can be replaced. All methods for precise partial hepatectomy depend upon control of the inflow vasculature and draining bile ducts and the outflow hepatic veins to the portion of the liver to be excised whether this is a segment, sub segment or an entire lobe. Low-risk recipients hardly spend a couple of days in the intensive care unit. The 1- year mortality rate has fallen from 40% in the early 1980s to less than 20% in the late 1990s, and the 5-year survival has increased form 53 to 75%.

Immunosuppressive agents are regressively reduced and withdrawn so that most patients with stable graft function are on monotherapy (usually with a calcineurin inhibitor) 6 or 12 months after transplantation. Rejection has become one of the less frequent problems whereas complications related to immunosuppression are responsible for the majority of deaths in patients surviving more than I year.

Overall, liver transplant recipients enjoy a good quality of life and often return to employment. Female recipients are allowed pregnancy and the risk is generally small. This evolution is mainly the result of standardization of the technique and improved patient selection.

Conclusion:

Liver transplantation is an important move forward in the treatment of severe liver disease. It has opened a new world for patients who otherwise were destined to die from their liver disease. The operation is a major one, and there are still problems associated with medications used to prevent rejection. But overall, patients can usually expect a good outcome with return to normal activities.