Chapter 75

Current Status of Liver Transplantation in Asia

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The success of liver transplantation for the patients with end-stage liver disease has resulted in a severe and universal shortage of suitable cadaveric donor organs. This situation is more acute in Asia where, due to various cultural, religious and social reasons, cadaveric organ donation is almost non-existent. Currently, almost all liver transplantations in Asia are performed with organs from living donors. A number of the larger centers in the more advanced Asian countries such as Hong Kong, Japan, Singapore, S Korea and Taiwan performed between 50 to 200 ALDLT annually. Unfortunately, the majority of countries in Asia still have not implemented liver transplant programmes.

The most important disadvantage of ALDLT is the potential for morbidity and even mortality to a healthy person. The reported donor mortality for ALDLT world wide is about 0.3%. As donor safety is of paramount importance, it is vital that ALDLT is performed by a surgical team experienced in major liver surgery and transplantation. The procedures must be carried out in medical centers with excellent facilities and resources. A comprehensive assessment and consent process for both donor and recipient must be implemented to ensure autonomy of decision and lack of coercion.

Gleneagles Hospital in Singapore has implemented an ALDLT programme to cater to patients from the surrounding countries. To date, 83 patients have been transplanted and only 7 are Singaporeans. Sixty nine were from related donors and 14 were from non-related but emotionally connected donors. The majority of the patients had chronic liver disease, 14 (17%) had acute failure. The major indication for transplantation was for hepatitis B cirrhosis, most of these patients had concurrent hepatoma. A total of 27 patients were transplanted due to hepatoma, 10 were within the Milan criteria and 17 were outside the Milan criteria. The mean MELD score was 15 (6 to 45). A total of 10 patients received MARS dialysis perioperatively. Our series of 83 patients achieved an adjusted 1-year survival rate of 69.88%.

ALDLT is a life saving procedure and can be successfully implemented in well equipped medical centers with experienced personnel in Asia. Stringent donor and recipient assessments are required to obtain the best results.