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Liver Transplantation In Hong Kong

Liver transplantation is an established treatment for patients with terminal liver disease. The 5-year survival rate in Western countries approaches 80%. The majority of patients can lead a normal life, and return to gainful employment, and some female patients can deliver normal babies. Although liver transplantation was not available in Hong Kong before 1991 the results are equally as favourable as in Western countries.[1] Up to December 1996, 53 liver transplantations were performed at Queen Mary Hospital, with a survival rate of 84%. Of these 53 operations, 14 were performed on paediatric patients whose survival rate is 100%. Our results and number of liver transplantations are now ranked the third in Asia, being next to Kyoto University and Shinshui University of Japan. The success is due to the contributions of the anaesthetists, hepatologists, microbiologists, paediatricians, pathologists, radiologists and surgeons; all of whom devoted numerous hours on the care of the patients, in addition to their daily work in the hospital.

The medical profession in Hong Kong is slow to accept liver transplantation. Not infrequently patients with terminal liver disease are not referred to the hospital, or if referred at all then only at the stage when the patient is already moribund. Transplanting a patient who is critically ill is risky, expensive, labour-intensive and is associated with a high mortality rate. On the other hand, transplanting a patient at an earlier stage is much safer, less expensive and not very different from a major hepatectomy. Physicians may not be convinced that a patient who is still up and about should require a liver transplantation. A good guideline, however, can be obtained from the synthetic function of the liver. When the prothrombin time is longer than 20 seconds, or the serum albumin is less than 23 g/l, the liver function is unlikely to support the patient for another 6-12 months. A liver transplantation should then be considered before the lethal complication of cirrhosis appears.

The real problem is the lack of cadaveric organ donation. This is due to insufficient awareness by doctors of potential donors as well as the reluctance of the relatives of brainstem dead patient to donate. However, there should be a sufficient donor pool in both private and public hospitals in Hong Kong. To increase the chance of organ donation it is essential to promote the concept of brainstem death and the willingness of the medical practitioners to report to the transplant coordinator of a potential donor. In general, a brainstem dead patient is suitable for organ donation if he is below 60 years of age and has a near-normal liver biochemistry. After explaining to the patient's relatives about brainstem death, the primary

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physician does not need to be involved in the counselling for organ donation. This is entirely the duty of the transplant coordinator.

In the absence of cadaveric organ donation, living donation may be an alternative. Although we are now able to perform living-related liver transplantation even in adult recipients[2] who may be bigger in size than the donor, this operation should not be encouraged as it involves extra costs and, more importantly, a risk of the donor dying from the operation. A case of mortality of a liver donor has already been reported from an European centre.[3] The goal in the future in Hong Kong should be to further enhance promotion of cadaveric organ donation so as to meet the demands of about 90 liver transplantations per year.

Liver transplantation is an expensive operation. It has always been argued whether the actual benefits are worth the additional costs. A solid answer based on a prospective randomized trial cannot be given because liver transplantation produces such a good result that a trial comparing it with a group of patients not receiving liver transplantation seems unethical. Nevertheless, it has been estimated that the number of quality-adjusted life-years that might be gained by liver transplantation is about 5.6 years.[4] Such an estimate is based on the reports from experienced centres in the West. If we want to produce even better results (in order to benefit our patients and to justify the cost of liver transplantation) the correct approach should be the redistribution of resources to establish a genuine liver transplant centre in Hong Kong. ■

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