Liver transplantation has undergone rapid evolution over the last two decades and has been established as the most effective treatment for various end-stage liver diseases. Yet, liver transplantation is a difficult undertaking. It requires not only sophisticated equipment, expensive drugs, and a team of dedicated and skilled clinicians, but it also entails the availability of a human liver graft. The development of liver transplantation in Asia has been very much slower than that in the western world, largely because of financial constraints and the scarcity of donor organs. Amongst 9,354 liver transplants reported to the Worldwide Transplant Directory in the year 2000, only 417, or less than 5%, were from Asian countries.

This symposium entitled “Liver Transplantation in Asia” focused on issues that are of special interest to surgeons in Asia. Professor Chao-Long Chen from Chang Gung Memorial Hospital, Kaohsiung, Taiwan addressed the attractive concept of doubling the number of cadaver grafts by splitting one liver graft into two. The operation is not only more technically demanding, it requires more complicated manpower and is more logistically demanding for the resource-restricted transplant centres in Asia. The paper discusses the various issues in the application of the technique and summarizes the early experience in Asia.

With the critical shortage of organ donors, living donor liver transplantation has the strongest appeal in Asia, and transplant centres in Asia have repeatedly advanced the frontier of living donor liver transplantation, particularly in its application in adult recipients. The paper by Professor Sung Gyu Lee and his colleagues describes the world’s largest single-centre experience of adult-to-adult living donor liver transplantation (LDLT) programme at the Asan Medical Centre in Seoul, Korea. The Asan group is recognized internationally for its development of surgical innovations such as reconstruction of the branches of middle hepatic vein with jump grafts as in modified right lobe liver transplantation and the use of dual liver grafts from two donors for one recipient. Such surgical innovations have extended the benefits of LDLT in adult recipients and have provided a new donor pool for the further development of liver transplantation in Asia. For years to come, many countries in Asia as well as other parts of the world will continue to depend on the expanded use of LDLT and the largest practice for this innovative procedure will remain centred in Asia.

Apart from surgical innovations to overcome the problem of organ shortage, surgeons in Asia are particularly interested in the role of liver transplantation for the treatment of hepatocellular carcinoma (HCC). HCC is one of the most common cancers world-wide and the largest concentration of cases is in Asia. Dr. Kai-Chah Tan and his colleagues from Singapore discussed the current selection criteria for patients with HCC to undergo liver transplantation. As a result of the limitations created by the extraordinary mismatch between the supply (low organ donor rate) and demand (high incidence of HCC), the potential role of liver transplantation in the treatment of HCC is severely restricted. The authors present a treatment strategy under such circumstances.

Liver transplantation is the last court of appeal for virtually all patients dying of end-stage liver disease. Nevertheless, liver transplantation is among the most demanding clinical disciplines in medicine and the outcomes are usually reflected with either great success or total failure, rarely a middle ground. There is much room for advancement in the development of liver transplantation in Asia and surgeons should take the lead in refining their knowledge and skills in order to achieve a fruitful outcome for their desperate patients.