Meet the Professor

Prof. Sung-Gyu Lee: future perspectives of living donor liver transplantation

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At the Fifth International Hepatobiliary Surgery and Liver Transplantation Summit Forum, *Hepatobiliary Surgery and Nutrition* (HBSN) had the honor to interview Prof. Sung-Gyu Lee who shared his insights into living donor liver transplantation (LDLT).

**Expert introduction**

Sung-Gyu Lee (*Figure 1*), MD, PhD, is the chair professor of surgery at the University of Ulsan College of Medicine and Asan Medical Center, and the president and CEO of Asan Healthcare System. As one of the world’s best-known experts in the field of liver transplantation, he has invented various techniques and protocols for transplanting liver from living donor to patient. Over the past 30 years, he has created a number of global records in the field of liver transplantation. He has the leading techniques in the technical innovation of LDLT, two-to-one dual liver transplantations, liver transplantation of different ABO blood types, and laparoscopic hepatectomy. His achievements in hepatobiliary and pancreatic surgery and liver transplantation have been internationally recognized. So far, he has published more than 400 academic papers.

**Editor’s note**

At the forum, Prof. Lee made an excellent speech on “Future Perspectives of Living Donor Liver Transplantation: Challenge and Passion”. He pointed out that LDLT is currently the commonest form of liver transplantation in Asia. While efforts to improve the number of deceased donor liver transplantation have been underway in most Asian countries, they have not been uniformly successful. While efforts to increase deceased donation rates should continue, progress in LDLT should also be supported as it will be the main work horse of liver transplantation in Asia, even in the future.

As one of the leading surgeons in the field of liver transplantation, Prof. Lee is very modest and open-minded to new techniques. “Be humble” is what he always bears in mind and that leads him to today’s success. Being passionate to patients, willing to take challenges, and open to new strategies and techniques make up his “recipe for success”, which we think will definitely inspire the next generations (*Figure 2*).

**Interview**

**HBSN: You had an excellent speech about LDLT. What do you think have been the biggest challenges in this field?**

**Prof. Lee:** The speech I made today was on “Future Perspectives of Living Donor Liver Transplantation: Challenge and Passion”. Liver transplantation is a life-saving operation for end-stage liver disease patients. However, there is a shortage of donors, regardless of deceased or living donors. The problem is especially severe in Asian countries, where we are confronting with serious deceased donor shortage and, as a result, we have to rely on its alternative, living donors. It was originally developed in East Asian countries and cities such as Japan, Korea, Taiwan and Hong Kong. In mainland China, there are plenty of deceased donors. Yet, as far as I know, it has high demand for living donors too due...
to the massive patient population. Therefore, my talk today was focused on how to expand the living donor pool so as to perform more LDLTs for our patients.

**HBSN: You have been awarded a number of prizes for your excellent techniques of liver transplantation. In your opinion, what are the key elements of the ongoing development of those techniques?**

**Prof. Lee:** It is an over-compliment. Technique is important, but it is not the only thing we need. The development of liver transplantation requires both passion and the spirit to beat every challenge or obstacle we encounter. Saving patients’ lives is the key. Never can we solve any problem if we think only in the old same way. We have to try out new options, no matter how many times we fail. Even if we do, which is especially common in the beginning of every trial, do not get frustrated. It is very important for surgeons to try out new methods that no one ever did before.

**HBSN: How do you see the future developments of liver transplantation?**

**Prof. Lee:** The field of liver transplantation has been evolving over the years. We are at just below the top right now—not yet the top, but reaching it soon. At present, we have very good clinical work. To further advance, future research work, say genome transplantation, should target at resolving problems like donor shortage. It takes time undoubtedly, but we are fully confident about it.