



## EP 050

## Liver Transplantation At The Korea University Medical Center : Analysis Of Over 500 Cases And Introducing Our Unique Multi- institutional Network To Improve Transplant Outcome

Soomin CHEON<sup>1</sup>, **Young-dong YU\***<sup>1</sup>, Hye-Sung JO<sup>1</sup>, Wan-Jun KIM<sup>2</sup>, Pyoung-jae PARK<sup>3</sup>, Sang-Jin KIM<sup>4</sup>,  
Hyung-Joon HAN<sup>4</sup>, Dong-Sik KIM<sup>1</sup>

<sup>1</sup>Department Of Surgery, Division Of HBP Surgery, Korea University Anam Hospital, REPUBLIC OF KOREA

<sup>2</sup>Department Of Surgery, Division Of HBP Surgery, Korea University Guro Hospital, REPUBLIC OF KOREA

<sup>3</sup>Department Of Surgery, Division Of Transplant And Vascular Surgery, Korea University Guro Hospital,  
REPUBLIC OF KOREA

<sup>4</sup>Department Of Surgery, Division Of HBP Surgery, Korea University Ansan Hospital, REPUBLIC OF KOREA

**Background :** Liver transplantation (LT) is an established therapeutic modality for patients with end-stage liver disease. Since the first case in 1994, over 500 cases liver transplantation have been performed at the Korea University medical center which is comprised of 3 tertiary hospitals (Anam, Guro and Ansan hospital). The aim of this study was to analyze our experience of over 500 cases of liver transplantation. In addition, we report our experience of creating a multi-institutional network or team (named the "Korea University Remedy Ensemble" or "KURE") to help prepare for, to perform and especially to improve the outcomes of liver transplantation at our medical center.

**Methods :** We reviewed the records of 518 adults who received LT between March 1994 and July 2022 from 3 tertiary centers. Patient outcomes including overall survival for all patients and disease free survival for hepatocellular carcinoma (HCC) patients were analyzed. In addition, we divided the patients into 2 groups according to the date of transplant before and during the "KURE" era, respectively. Outcomes were compared between the two groups.

**Results :** Most patients were male and the mean age was 51 years. The most common underlying liver disease was liver cirrhosis due to hepatitis B and 40% of patients also were diagnosed with HCC. More patients underwent deceased donor LT than living donor LT (n=265 vs n=253). Biliary complications developed in less than 30% of patients. The 1-, 3-, 5-year overall survival was 90.4%, 83.1%, 81%, respectively. And there was no significant difference between deceased donor and living donor LT. Similarly in HCC patients, the 1-, 3-, 5-year disease free survival was 90.5%, 84.2%, 83.0%, respectively. However the disease free survival in patients undergoing living donor LT was significantly lower (p=0.031) probably due to the large tumor burden in these patients. Of the 518 patients, 191 were transplanted during the "KURE" era. Operative time, amount of blood transfusion, non-biliary complications, acute rejection, 30- and 90 day mortality and therefore overall survival all significantly improved during the "KURE" era.



**Conclusions** : Survival outcomes were comparable to other major centers and significantly improved during the “KURE” era. However patients undergoing living donor liver transplantation had worse disease free survival than deceased donor transplant patients due to the pre transplant tumor burden. The “KURE” network can be a model for nearby tertiary institutions to improve their transplant outcome in certain regions of Korea.

Corresponding Author : **Young-dong YU** (hust1351@naver.com)