VII-3

## Outcome of Living Donor Liver Transplantation for Hepatocellular Carcinoma with Portal Vein Invasion. Is It Contraindication for Liver Transplantation?

Hepatobiliary Surgery and Liver Transplantation, Asan Medical Center, University of Ulsan College of Medicine, Korea

**Deok-Bog Moon, Sung-Gyu Lee, Shin Hwang, Ki-Hun Kim, Chul-Soo Ahn, Tae-Yong Ha, Gi-Won Song, Dong-Hwan Jung, Gil-Chun Park, Sung-Won Jung, Samuel Yun, Jeong-Man Namkung**

**Purpose:** Even though liver transplantation (LT) for HCC with portal vein (PV) invasion has been contraindicated because of poor prognosis after LT, living-donor liver transplantation (LDLT) for those patients is performed infrequently after informed consent because of strong request of donor & recipient. Our experiences of LDLT for HCC with PV invasion hinted that some pateints could survived unexpectedly long. Hence, we are aim to find favorable prognostic factors by reviewing LDLT patients for HCC with PV invasion.

**Methods:** From October 1993 to December 2009, LDLT for HCC with PV invasion was perforemd in 28 patients (3.5%) amng total 809 LDLT patients for HCC. The pateints were subdivided into less than 24 months Short-surival group (SSG, 13), and more than 24 months Long- survival group (LSG, 11). Four patients were excluded due to short follow up time (1) and tumor unrelated death (3). Variables between two groups were compared and then significant varibles were evaluated how much affected on survivals.

**Results:** The overall and disease free 5-year survival rate after LDLT for HCC with PV invasion were 29.8% respectively. Mean age, AFP level, PET scan, pre-LT treatment or not, graft-versus-recipient weight ratio, maximmum tumor size on pre-LT CT, and Edmonson-Steiner grade were not diffenent between SSG and LSG. On pre-LT CT scan, however, LSG had significantly higher frequency of lipiodol uptake of portal vein tumor thrombus (36% vs 0%), less tumor number (2.8 vs 7.4), smaller sum of tumors diameter (6.9 cm vs 15.7 cm), single lobe tumor location (81.8% vs 30.8%), and higher frequency of subsegmental PV tumor invasion (Vp1/2/3/4, 3/4/4/2 vs 0/6/5/2) than SSG. When HCCs were localized at single lobe, the 5-year overall survival was 62.9%, almost comparable to HCC patients without PV invasion. In addition, sum of tumor diameter (11 cm) and tumor numbers (5) had significantly better overall survival 48%, 40.6% respectively.

**Conclusions:** Among HCC patients with PV invasion, selected patients having lipiodol uptake of PV tumor thrombus, less than 5 tumor number, less than 11 cm sum of tumor diameter, single lobe localization, and Vp1 might not be any more absolute contraindication for LDLT.

VII-4

## Clinical Consequence of Hepatic Parenchymal Infarct of Non-vascular Origin Following Liver Transplantation

Department of Hepatobiliary Pancreas Surgery and Liver Transplantation, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

**SY Yoon, SG Lee, S Hwang, CS Ahn, KH Kim, DB Moon, TY Ha, GW Song, DH Jung, KW Kim, GC Park, YD Yu, YI Choi, PJ Park, JM Namgung, SY Jung, CS Park, HW Park, HJ Lee**

**Purpose:** To evaluate the clinical finding and course of non vascular liver ischemia after liver transplantation and to classify the hepatic parenchymal infarct as the configuration of the infracted area and extent.

**Materials and Method:** The retrospective study was performed about the 1782 patients received living liver transplantation between January 2003 and September 2010 in our institution. 9 (0.39%) patients was showed non-vascular liver infract. They were classified as the location and their configuration, and then their clinical course and outcome were compared. By performing the dynamic liver CT scan and Doppler, we have ruled out liver infarct associated with hepatic artery problem, portal vein narrowing and hepatic outlet obstruction. From the previous chart review, we also excluded liver infarct with shock and hypoglycemia, For excluding prolonged ischemic time, we excluded all cases of deceased donor