**Background:** Portal vein thrombosis (PVT) is a surgical challenge in liver transplantation (LTx). Presence of PVT was considered as a contraindication for LTx in some centers due to the controversy revolving around the long term outcome of these patients. Therefore, we studied the long term outcome of adult patients with PVT in LTx in a tertiary institution with specialized transplantation unit.

**Methods:** There were 570 cases of adult liver transplantation between 2004 and 2009 in our institution. We excluded 99 cases of deceased donor liver transplantations to facilitate incidence, outcome and surgical management. There were 56 patients with existing PVT before 471 living donor liver transplantations. Patients with PVT were divided into 2 groups according to Yerdal's classification, mild PVT group (Yerdal group 1 & 2) 43 cases and severe PVT group (Yerdal group 3 & 4) 13 cases.

**Results:** Patients with PVT constituted 11.8% (n=56) in our cohort. When comparing between patients without and with PVT, we did not find statistical difference in terms of age, gender, Child-Pugh score, MELD score & indication for LTx (benign vs malignancy). Rate of PV complication was 3.4% in the non-PVT group and 9.9% in PVT group (p=0.047). Duration of operation and total amount of blood transfusion were also comparable between two groups. The overall survival of PVT group was not significantly different compared to the non-PVT group (p=0.059). Demographics of 43 cases of mild PVT (76.7%) and 13 cases of severe PVT (23.3%) were not different except in severe PVT group had more malignancy cases (27 cases vs 2 cases, p=0.011). The median overall survival of mild PVT group is comparable with non-PVT group (p=0.059) and the median overall survival of severe PVT group is 32 months (1-88) and non-PVT group is 41 months (1-93) (p=0.066). 5-year survival rate of severe PVT is about 60%.

**Conclusions:** Existing PVT prior to liver transplantation does not lead to poorer long term outcome. However in severe cases, we need more careful approach. Therefore, PVT should not be a contraindication to liver transplantation.

**Keywords:** Portal vein thrombosis, Liver transplantation, Survival

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**0-070**

The different etiology of Fulminant Hepatic Failure in Korea and prognostic factors in patients underwent liver transplantation for Fulminant Hepatic Failure

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**Background:** The prognosis of FHF depends on the etiology and reversibility. Although the King’s College Hospital (KCH) criteria and Clichy/Villejuif criteria remain the most widely used prognostic criteria of FHF, there are also limitations due to geographically various and different causes of disease. Furthermore it is difficult to estimate prognosis after liver transplantation (LT) according to these criteria. Therefore, we identified the etiologic difference of FHF in Korea, and analyzed the prognostic factors after LT for FHF.

**Methods:** We retrospectively reviewed medical records of 42 patients diagnosed with FHF and underwent LT from April 1999 to April 2011 at Samsung Medical Center, Seoul, Korea. We evaluated the etiologic change and difference compared with western countries. The patients were categorized into two groups according to the in-hospital result of LT; survival group (n=35) and mortality group (n=7). Perioperative profiles were compared between groups to identify the in-hospital poor prognostic factors after LT for FHF.

**Results:** The most common cause of FHF underwent LT was toxic hepatitis (45.2%). Unlike western countries, there was no paracetamol-related FHF but herbal medication or folk remedies are the most frequent causes of toxic hepatitis (58%). There was no patient underwent LT due to HAV-related FHF until 2005, however HAV-related FHF increased significantly and comprised the main portion of FHF (34.5%) after 2005. Encephalopathy grade, onset time, pre-transplantation renal replacement and ventilator treatment were significant prognostic factors after LT for FHF in univariate analysis. In multivariate analysis, pre-transplantation renal replacement treatment was the independent prognostic factor after LT for FHF.

**Conclusions:** In this study, we showed the different etiology of FHF in Korea and identified the renal replacement treatment as an independent prognostic factor after LT for FHF. In order to confirm the prognostic factors after LT for FHF, large size of studies are needed.

**Keywords:** Fulminant hepatic failure, Acute liver failure, Hepatic failure

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**O-071**

Association of Apolipoprotein E genotypes with disease progression in hepatitis B virus infected patients

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**Background/Aims:** Apolipoprotein E (ApoE) plays an important role in regulating lipid and lipoprotein metabolism, and ApoE genotypes are known to affect plasma lipoprotein concentrations. We investigated whether ApoE genotype determine disease outcome in hepatitis B virus (HBV) infected individuals, and to verify the association with the occurrence of hepatocellular carcinoma (HCC) in patients with chronic liver diseases of various etiologies.

**Methods:** This hospital based case-control study enrolled 183 subjects (47 healthy controls, 50 HBV originated liver cirrhosis, 86 HCC). ApoE genotypes were determined by ApoE genotyping kit, using a PCR method. To verify the biological significances of ApoE genotype, a serum ApoE levels were measured by ELISA kit.