

E22

**Living Donor Liver Transplantation for Advanced Hepatocellular
Carcinoma with Portal Vein Tumor
Thrombosis after Concurrent Chemoradiation Therapy**

**Jae Geun Lee¹, Dai Hoon Han¹, Yoon Bin Jung¹, Deok Gie Kim¹, Man Ki Ju¹, Dong Jin Joo¹, Gi Hong Choi¹,
Jin Sub Choi¹, and Soon Il Kim¹**

¹Department of Surgery, Yonsei University College of Medicine, Seoul, Korea

Purpose:

Locally advanced hepatocellular carcinoma (HCC) with portal vein thrombosis carries a 1-year survival rate <10%. Localized concurrent chemoradiotherapy (CCRT), followed by hepatic arterial infusion chemotherapy (HAIC), was recently introduced in this setting. Here, we report our early experience with living donor liver transplantation (LDLT) in such patients after successful down-staging of HCC through CCRT and HAIC.

Methods:

Between December 2011 and December 2017, twenty-two patients with locally advanced HCC at initial diagnosis were given CCRT, followed by HAIC, and underwent LDLT at the Severance Hospital, Seoul, Korea. CCRT [45 Gy over 5 weeks with 5-fluorouracil (5-FU) as HAIC] was followed by HAIC (5-FU/cisplatin combination every 4 weeks for 3–12 months), adjusted for tumor response. .

Results:

The 1-year overall survival and disease-free survival rate were 90.9% and 87.5%, respectively. The 3-year overall survival and disease-free survival rate were 72.7% and 49.0 %, respectively. There were nine instances of post-transplantation tumor recurrence during follow-up monitoring (median, 46 months; range, 1-72 months) Median survival time from initial diagnosis was 33 months (range 11-110 months).

Conclusion:

Using an intensive tumor down-staging protocol of CCRT followed by HAIC, LDLT may be a therapeutic option for selected patients with locally advanced HCC and portal vein tumor thrombosis.