

# The Novel Surgical Technique Using Gastroepiploic Vein For Restoration Of Portal Inflow In Living Donor Liver Transplantation For Patient With Diffuse Portomesenteric Thrombosis

Sang-Hoon KIM<sup>1</sup>, Deok-Bog MOON<sup>\*1</sup>, Woo-Hyung KANG<sup>1</sup>, Sung-Gyu LEE<sup>1</sup>

<sup>1</sup>*Division Of Liver Transplantation And Hepatobiliary Surgery, Department Of Surgery, Asan Medical Center, University Of Ulsan College Of Medicine, Seoul, REPUBLIC OF KOREA*

**Background** : For restoration of portal inflow in patients with diffuse portomesenteric vein thrombosis (DPVT) without available enlarged portosystemic collaterals, cavoportal hemitransposition is a proposed surgical option in deceased-donor liver transplantation but rarely indicated in living-donor liver transplantation (LDLT), which requires splanchno-portal inflow for regeneration of partial liver graft. In the presence of engorged gastroepiploic vein (GEV) without available collaterals for portal inflow, venous interposition graft using fresh cadaveric inferior vena cava (IVC) from GEV could be valid surgical management for portal flow reconstruction. This is the first report of a successful restoration of portal inflow using GEV.

**Methods** : A 52-year-old male patient with cirrhosis due to hepatitis B underwent LDLT from his son due to recurrent esophageal varices rupture and increased ascites. In pre-operative computed tomography, total portomesenteric thrombosis and dilated GEV 8 mm without large splenorenal shunt were identified. Portal anastomosis was established by venous interposition graft using fresh cadaveric IVC from GEV.

**Results** : At one-year post-operative follow-up, the patient had well regenerated graft with enough portal inflow through the enlarged GEV.

**Conclusions** : Portal anastomosis using venous interposition graft from engorged GEV could be a useful surgical option for LDLT selectively in patient with DPVT.

Corresponding Author : Deok-Bog MOON (mdb1@amc.seoul.kr)