Abstract Type : Oral Presentation
Abstract Submission No. : F-006066

Portal hypertension after liver transplantation

Atsuyoshi Mita[1], Noriyuki Kitagawa[1], Yasunari Ohno[1], Yuichi Masuda[2], Akira Shimizu[2], Koji Kubota[2], Tsuyoshi Notake[1], Kentaro Umemura[2], Shiori Yamazaki[1], Yuji Soejima[1]

[1]Department of Surgery, Division of Transplant Surgery, Shinshu University School of Medicine, Japan
[2]Department of Surgery, Shinshu University School of Medicine, Japan

Introduction: Portal hypertension (PoH) after liver transplantation (LT) is a severe complication that could result in graft loss. This study aimed to clarify characteristics and evaluate the treatment outcome of PoH after LT.

Methods: This single-center, retrospective cohort study was conducted at a university hospital in Japan and included 309 recipients, excluding 34 patients who lost their graft within 1 year after LT.

Results: Of 309 LT recipients, 65 (21.0%) had PoH. The etiology of PoH consisted of pre-hepatic in 24 (36.9%), hepatic in 35 (53.8%), and post-hepatic in 6 (9.2%). The 10-year survival rate was significantly lower in patients with PoH than in those without PoH (68.6% and 92.0, $p<0.0001$). Out of 65 patients with PoH, 30 (46.2%, Con-Tx group) could be conservatively treated by such as the use of diuretics. Other 35 (53.8%, Inv-Tx group) underwentre-transplantation (n=7), operations such as splenectomy (n=4), interventional radiology (n=17), endoscopic intervention (n=4), and drainage of pleural effusion and/or ascites (n=3). The Inv-Tx group showed a significantly better 10-year survival rate than the Con-Tx group (78.4 vs. 53.3%, p=0.0049). IVR could be performed in 10 of 24 patients with pre-hepatic PoH (41.6%) and 6 of 6 patients with post-hepatic PoH (100%), while 19 (54.3%) were only administered drugs and only 5 (14.3%) could be performed re-transplantation in 35 patients with hepatic PoH. In Inv-Tx group, the graft survival rate was significantly worse in 15 patients with hepatic PoH than in 14 with pre-hepatic PoH and 6 with post-hepatic PoH (10-year graft survival rate: 46.7%, 85.7%, and 83.3%, respectively; p=0.0131).

Conclusion: PoH in LT recipients negatively impacted patient survival. Notably, hepatic PoH was difficult to treat and showed a worse outcome. Invasive treatment for post-transplant PoH could improve patient outcomes. Thus, appropriate diagnosis and treatment selection are important.