



LV PP 3-4

Immediate outcomes of percutaneous radiofrequency-assisted liver partition and portal vein embolization for staged hepatectomy (PRALPPS) in patients with intrahepatic cholangiocarcinoma (IHCC).

Natalya KULIKOVA¹, Yulia KULEZNEVA², Olga MELEKHINA², Ruslan ALIKHANOV¹, Mikhail EFANOV¹

¹HPB surgery, Loginov A.S. Moscow Clinical Scientific Center, Russia

²Interventional radiology, Loginov A.S. Moscow Clinical Scientific Center, Russia

Introduction : Surgical resection in IHCC is the only feasible modality with a curative ability. The challenge balances between growing the future liver remnant (FLR) in a short time and the same time preventing tumor progression and surgical complications. Associating liver partition and portal vein ligation for staged hepatectomy (ALPPS) gives a chance for fast kinetic growth, but with high morbidity and mortality

Methods : This observation includes 8 comparative patients with IHCC: 4 underwent portal vein embolization (PVE) and 4 - ALPPS (3 - RALPPS). PVE group has median age 62,2 years, median FLR volume was 564,4 ml, 33%. ALPPS group has median age 58,6 years, median FLR volume was 542,6 ml, 34,9%. 1 patient had classic ALPPS and 3 had miniinvasive variant.

Results : The first stage was uncomplicated in the both groups. The median FLR volume became 785 ml (46%) in a 27,5 days and 753,9 ml (38%) in a 17,7 days in PVE and ALPPS groups respectively. Nevertheless, degree of hypertrophy was similar: 41% in PVE and 40,4% in ALPPS. Kinetic growth rate was significantly different: 1,38 and 2,62%/day respectively. Seven patients completed the second stage. Sever morbidity was revealed with only ALPPS group: grade IIIa (n-1) and grade V (n-1) according to Clavien-Dindo. The in-hospital death was associated with classical ALPPS in one patient with extremely small FLR (<30%).

Conclusions : The modified ALPPS (PRALPPS) may be considered as a safe tool to achieve rapid and sufficient hypertrophy in patients with IHCC.

Corresponding Author. : **Natalya KULIKOVA** (n.kulikova@mknc.ru)