LV OP 2-3

Risk factors of liver dysfunction for donor after extended right lobe graft donation

Mina KIM, Bong-Wan KIM*, Hee-Jung WANG, Sung-Yeon HONG, Xue-Yin SHEN

Hepatobiliary surgery and liver transplantation, Ajou university hospital, Korea

Introduction : The aim of this study is to find risk factors of liver dysfunction for donor after extended right lobe graft donation.

Methods : From November 2005 to May 2018, total 52 liver donors were included in this study. Donor characteristics include age, sex, BMI, liver volumetry and intraoperative findings. We divided 2 groups on the base of our criteria defined as below; (1)serum peak bilirubin over 3.0mg/dL or (2)peak INR over 2.0 or (3)ISGLS PHLF grade B or C or (4)ascites over 500cc on or after pod5. We defined safety group relevant to no criteria and hazard group relevant to over 1 criteria.

Results : In volumetry, LLV/TLV, LLSV, and LLSV/TLV showed significant differences. We found the cut off value of LLV/TLV(38%) and LLSV/TLV(20%) using mean and median value. We categorized 3 groups using each cut off values regarded as risk factor, as below; (1)LLV/TLV≥38% and LLSV/TLV≥20%, (2)LLV/TLV<38% or LLSV/TLV<20%, (3)LLV/TLV<38% and LLSV/TLV<20% . These showed significant differences and the odd ratio were 8.8 and 28.0 each in multivariable analysis.

Conclusions : In this study, we could find that LLV/TLV and LLSV/TLV played an important role when considering use of extended right lobe graft in LDLT. Especially when LLV/TLV < 38% and LLSV/TLV < 20%, the risk of liver dysfunction is increased more.

Corresponding Author. : Bong-Wan KIM (drbwkim@ajou.ac.kr)