Nov. 15<sup>(Wed)</sup>~18<sup>(Sat)</sup>, 2023 Conrad Seoul, Korea

Submission No.: PG03-9408

Session: Postgraduate Course 3 (Liver)

Date & Time, Place: November 16 (Thu), 10:30-12:00, Room 3F-1

Session Title: How do I do(Lap/Robotic RL): Parenchymal division & BD division

## Laparoscopic living donor hepatectomy: experiences from West China Hospital

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Laparoscopic Living Donor Right Hepatectomy: Experience From West China Hospital Wei Yonggang Living donor liver transplantation program in West China Hospital (WCH) started in 2004. By the year 2009, the first case of minimal invasive right donor hepatectomy (hand-assisted) in mainland China was carried out in WCH. In 2015, 6 months after the implementing of Laparoscopic liver program in WCH, We completed the first case of successful pure laparoscopic right hepatectomy (PLRH) in mainland China in 2015. Until now, more than 50 cases of PLRH of experience had been accumulated in WCH. Here belows are experiences/take-home messages from WCH: **Parenchymal dissection.** 

- 1. Pringle maneuver: there once was a controversy of whether Pringle maneuver would add extra risk of ischemia/reperfusion injury to graft during partition of the liver. Despite existed evidence from a Korean RCT, experiences have make the dispute to a conclusion. Pringle maneuver could minimize the intraoperative bleeding, shorten the dissection time, increase the dissection efficiency, therefore achieve a more stable hemodynamics during operation.
- 2. Dissection instruments selection. Cavitron Ultrasonic Surgical Aspirator (CUSA) is the golden-standard of PLRH, but in surgeons with expertise, Harmonic scaple can be an equivalent alternative of CUSA.

## Bile duct dissection.

- 1. Detailed preoperative case-specific evaluation of the biliary anatomy is mandatory. In our experience, a common orifice of right posterior and anterior ducts with a length more than 0.5cm in preoperative Magnetic Resonance Cholangiopancreatography (MRCP) would be eligible as a PLRH donor candidate.
- 2. In the initial 5 cases, intraoperative Radio-Cholangiography was used to clarify undetected variation biliary anatomy. Currently, Indocyanine green (ICG) fluorescence cholangiography is used to identify suspected variations in selective candidates during operation. Limitations of ICG cholangiography are as





belows: when Glissonian sheath is thick, verification of the bifurcation of is difficult; cranio-confluenced right posterior bile duct sometimes is hard to be visualized; Dosage of ICG is individualized, occlusion would influence the time-needed for bliliary duct imaging.