Supplementary materials:

Can retrohepatic tunnel be quickly and easily established for laparoscopic liver hanging maneuver by Goldfinger dissector in laparoscopic right hepatectomy?

Liu-xin CAI, Fang-qiang WEI, Yi-chen YU, Xiu-jun CAI

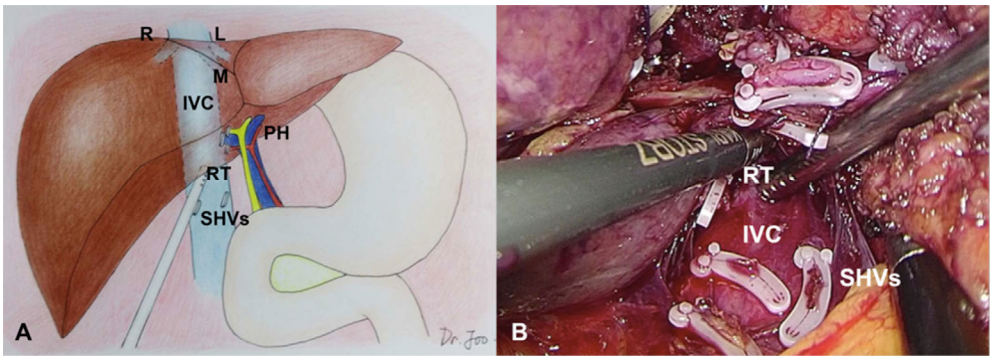

Fig. S1 Establishing the initial caudal portion of the retrohepatic tunnel (initial cad-RT)
The peritoneum reflection anterior to the infrahepatic inferior vena cava (IVC) was incised and two branches of short hepatic veins (SHVs) around the cad-RT were ligated with Hem-o-locks. R, Right hepatic vein; M, Middle hepatic vein; L, Left hepatic vein; PH, Portal hepatis. The red, hepatic artery; The blue, portal vein; The yellow, hepatic duct. This step is described with illustration (A) and photograph (B), respectively

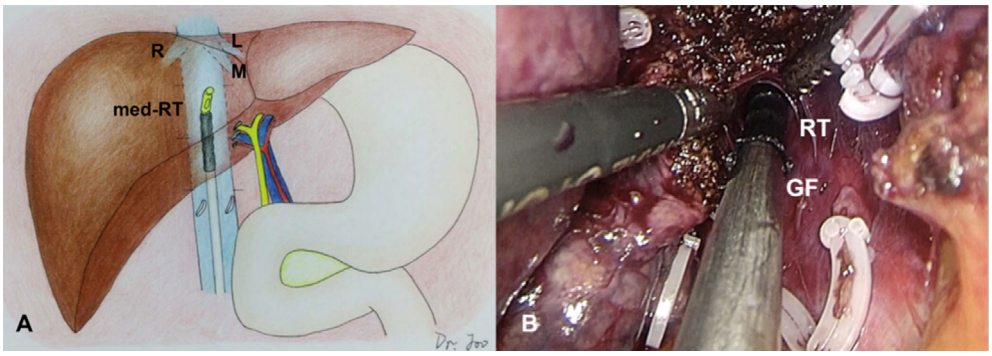

Fig. S2 Establishing the median portion of the retrohepatic tunnel (med-RT)
The Goldfinger dissector (GF) was advanced from the cad-RT (the caudal portion of the RT) in a caudal to cranial direction with its tip flexing at 30°, forming the median portion of RT (med-RT) (approximately one-third of the total RT). R, Right hepatic vein; M, Middle hepatic vein; L, Left hepatic vein. This step is described with illustration (A) and photograph (B), respectively

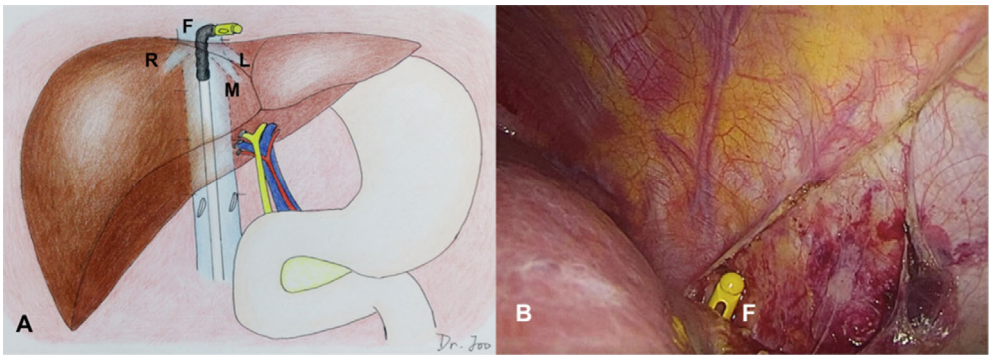

Fig. S3 Establishing the total retrohepatic tunnel (RT)

The total RT was completed and connected by the Goldfinger dissector via the med-RT (the median portion of the RT) in a cranial direction with its tip flexing between neutral 30° and 90°. Thus, quick and easy establishment of RT was achieved by a five-step strategy. R, Right hepatic vein; M, Middle hepatic vein; L, Left hepatic vein; F, Fossa of the superior hepatic vein. This step is described with illustration (A) and photograph (B), respectively

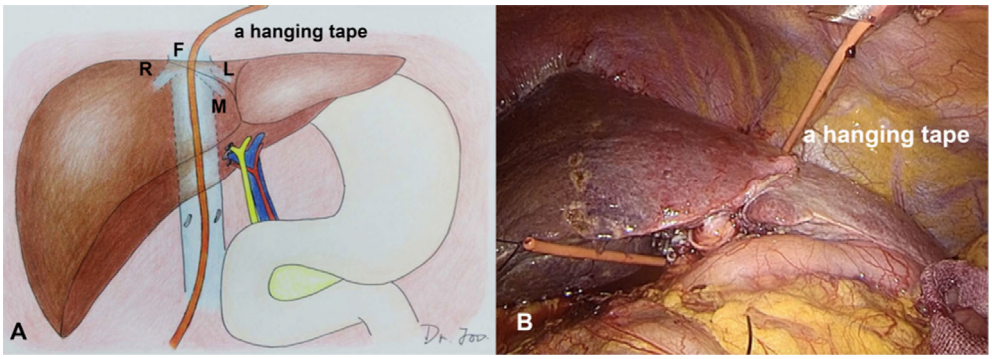

Fig. S4 Placement of the hanging tape through the whole retrohepatic tunnel (RT)

The cranial end of the previous leading Vicryl was secured to the end of a hanging tape (#8 catheter) to form a loop. Then the caudal end of the leading Vicryl was retracted from the cranial-to-caudal direction and followed the loop out of the whole RT. When the retaining suture of the loop was divided, the hanging tape was successfully and completely placed through the RT. R, Right hepatic vein; M, Middle hepatic vein; L, Left hepatic vein; F, Fossa of the superior hepatic vein. This step is described with illustration (A) and photograph (B), respectively

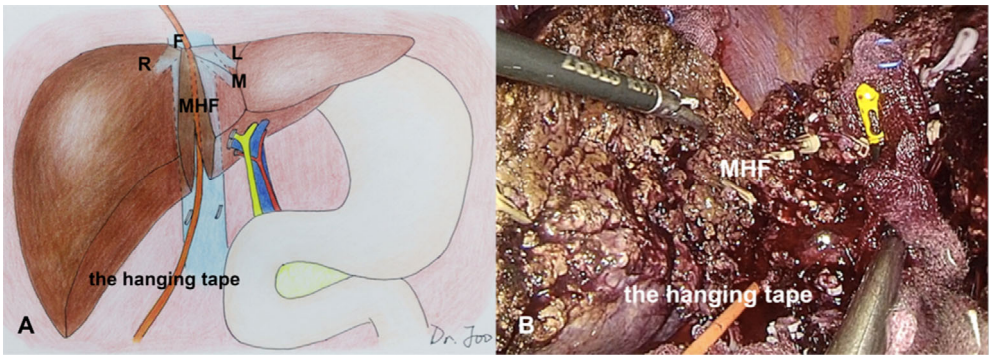

Fig. S5 Parenchymal transection of the median hepatic fissure (MHF)
The hanging tape was loosened and the assistant used grasping forceps to seize the cranial part of the tape tightly while the caudal part of the tape was retracted out of the port E tightly to trigger lifting tension. With this lifting tension effect the posterior superior part of the MHF was transected. Next, the anterior surface of the IVC was clearly exposed. R, Right hepatic vein; M, Middle hepatic vein; L, Left hepatic vein; F, Fossa of the superior hepatic vein. This step is described with illustration (A) and photograph (B), respectively

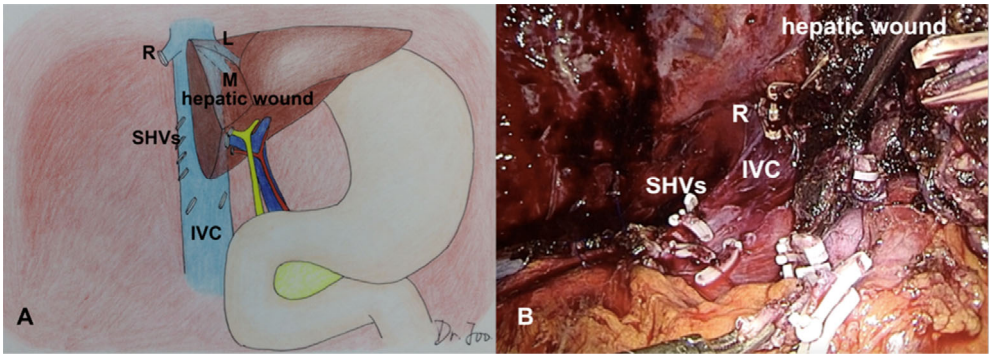

Fig. S6 Achievement of hemostasis after removal of the specimen
R, Right hepatic vein; M, Middle hepatic vein; L, Left hepatic vein; SHVs, Short hepatic veins; IVC, Inferior vena cava. This step is described with illustration (A) and photograph (B), respectively