



Submission No.: PG01-9391 Session : Postgraduate Course 1 (Liver) Date & Time, Place : November 16 (Thu), 08:30-10:00, Room 3F-1 Session Title : How do I do (RL donor): Hilar dissection & RL mobilization

## How I do laparoscopic donor right hemihepatectomy independent to an assistant : hilum exposure and parenchymal dissection

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Although the pure laparoscopic donor hepatectomy has been getting popular, there are still some challenges during procedures. There are two unique features of donor hepatectomy comparing other liver resection for the treatment of the cancer. First of all, donor hepatectomy should be performed without division of right hilar structures. Second is that the hilar vascular structures should be very carefully touched to avoid intimal injury. Therefore, many operators need a lot of active assistance from the assistant. However, in order to have a stable operation and instant response to emergency situation such as intraoperative bleeding, the assistance of an assistant should be minimized. In other words, the dependence on the assistant should be minimized in order to produce a certain level of surgical results at all times regardless of the skill level of the assistant. Here I will describe two technical tips do minimizing role of an assistant. The first is about exposure of hilar structures. Right hilar structures locate beneath the quadrate lobe. The inferior surface of the guadrate lobe locates between the gallbladder and umbilical portion which is connected to the round ligament. Therefore, fixation of the round ligament to the anterior abdominal wall with intracorporeal suture and upward traction of gallbladder by assistant can provide full exposure of right hilar structures. Cystic duct traction to the left medial side is helpful to expose right hepatic artery. Therefore, retraction of cystic duct to the fixed round ligament by clips could allow stable retraction without help by assistant. The second is the liver parenchymal dissection under the traction of both side of division line using rubber band. Liver parenchyme can be dissected autonomously and spontaneously by the elasticity of rubber bands. Traction of parenchyme by the assistant is unnecessary by this technique. In conclusion, minimizing the assistance of an assistant will enable a stable donor hepatectomy.