

## Robotic Single Plus One Right Hepatectomy For Donation

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**Background :** Most important concern in living donor liver transplantation is donor safety. At the same time, minimal invasive approach has become widely performed in major hepatectomy. Nowadays, pure laparoscopic or robotic donor hepatectomy has been increased with development of surgical technique. This is first case of successful robot donor hepatectomy using minimized port number.

**Methods :** Donor is 32 years old male. There is no anomaly in liver anatomy. Mid hepatic vein has two branches from right liver. MRCP show normal confluence of bile duct. According this finding, Robotic donor hepatectomy was performed using the Da Vinci Xi single-site<sup>®</sup> surgical platform (DVSSP) and additional one port. Additional robotic 12mm-port was placed left side of patient and 3rd arm was used this site.

**Results :** After the pathologist confirmed that there was no fatty liver in the liver biopsy, full right lobe mobilization was performed, and hilar dissection was done. right hepatic artery was isolated carefully. Right portal vein was completely exposed and isolated under retracting right hepatic artery laterally. Liver parenchymal transection line was drawn after transient clamping of the right hepatic artery and right portal vein using bulldog clamp. Transection plane was straightly exposed using rubber band retraction technique. After liver parenchymal resection was performed, hilar plate was isolated carefully. After The caudate lobe parenchyma was divided, and parenchyma transaction was completed. After suprapubic transverse incision was made for liver delivery, right bile duct, right hepatic artery, right portal vein was divided. Right hepatic vein also ligated and divided using endo GIA.

**Conclusions :** The donor was discharged on the 5th postoperative day after confirming that there was no complication on postoperative CT scan. donor and recipient live well without complication.

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