

VE 2**Pure laparoscopic left hepatectomy using Arantius' ligament approach combined Glissonean pedicle approach (with video)**

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Introduction : We describe a novel extra-glissonian approach combined Arantius' ligament approach for totally laparoscopic left hepatectomy. The extra-glissonian approach and Arantius' ligament approach have proven useful in open surgery for left hepatectomy. And these approaches could be even more useful in the laparoscopic context.

Methods : The study included 11 patients who underwent totally laparoscopic left hepatectomy between July 2016 and September 2017. Arantius' ligament was then identified, encircled and divided. Retracting the caudal stump of the ligament revealed a space between the left Glissonean pedicle and the liver parenchyma. The left Glissonean pedicle was encircled extrahepatically with a cotton tape and transected with an endostapler. The parenchymal dissection then proceeded to the left hepatic vein, which was finally divided. The specimen was placed in a plastic endobag, and extracted through a suprapubic incision.

Results : No postoperative mortality was encountered and no Glissonean injuries, including bleeding or biliary leakage, occurred. The mean length of surgery was 290113 min, and the mean blood loss was 350187 ml. The mean duration of hospital stay was 11.73.5 days. Pathology showed free surgical margins.

Conclusions : The Arantius' ligament approach combined Glissonean pedicle approach appears to be feasible and safe for successfully performing totally laparoscopic left hepatectomy.

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