EPL-01

LAPAROSCOPIC LEFT LATERAL HEPATECTOMY FOR LIVER TUMOR – VIDEO PRESENTATION

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Introduction: Laparoscopic liver resection has evolved and widened its scope from being limited to benign conditions and minor resections to malignancies and major liver resections. We present a video of laparoscopic left lateral hepatectomy for liver tumor.

Case summary: 60 year old lady presented with lump in right upper abdomen for past 2 months with history of loss of weight. No history of jaundice, vomiting, fever, abdominal distension, GI bleed. She did not have comorbidity. On examination she was not pale, anicteric. Abdomen examination revealed a firm lump in right upper abdomen with no free fluid. Her viral markers were negative. Her routine biochemical parameters were within normal limits. Her CT scan showed 11.5x9.8cm heterogenous enhancing lesion in left lobe liver with no evidence of dissemination. FNAC revealed low grade carcinoma. Intra operative findings showed 15x15cm lobulated lesion in left lateral segment of liver compressing and displacing stomach with no lymphadenopathy. Right lobe of liver was normal. Her post operative course was uneventful. She was discharged on POD 6. On 2 months follow up there was no evidence of recurrence.

EPL-02

LAPAROSCOPIC SEGMENT 1 LIVER RESECTION

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Introduction: The following video demonstrates one of the few laparoscopic segment 1 (s1) liver resections performed globally, and what is thought to be the first one to be performed in the United Kingdom.

Method: The patient in question was found to have a 15mm lesion in segment 1 on a routine follow-up CT scan after a nephrectomy for renal cell carcinoma 2 years previously. The diagnosis was confirmed on contrast enhanced CT and MRI imaging. Following omental dissection a Pringle sling was placed. Mobilization of s1 was performed with hook diathermy. The inferior vena cava was exposed with gentle blunt dissection with suction and careful hook diathermy. S1 is slung to allow completion of transaction with a laparoscopic stapler. The specimen is removed with a laparoscopic specimen bag via an extension of the port site incision. The lesion is identified in the specimen. The transaction site is checked for haemostasis and bile leaks – leaks are laparoscopically sutured. The clean, dry transaction site is seen before haemoseal glue and fibin wool are placed to complete haemostasis.

Results: The patient made an uneventful recovery and was discharged on the 4th postoperative day. Histology showed the lesion to be hepatocellular in origin and a R0 resection was achieved.

Conclusions: The video presents an achievable and safe approach to laparoscopic segment 1 liver lesion resection with acceptable margin and good patient outcome.

EPL-03

LAPAROSCOPIC LIVER RESECTION FOR VARIED INDICATIONS

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Laparoscopic Liver resections are now performed all over the world with increasing frequency. The spectum and indications of Liver resection varies from region to region. This video depicts common indications of surgery in this part of the world including; for Hepatic Hydatid disease - Total Cystopericystectomy & Liver resection; bisegmentectomy for gallbladder cancer; resection for HCC and formal left hepatectomy for intrahepatic cholangiocarcinoma.

PL-04

LAPAROSCOPIC LEFT HEPATECTOMY

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The video depicts a case of Intrahepatic Cholangiocarcinoma involving the left lobe (Segment II, III, IV) which was treated by a formal left hepatectomy using laparoscopic approach. The specimen was taken out from the lower abdomen using a pfannensteil incision.

EPL-05

EXPERIENCE OF SINGLE-INCISION LAPAROSCOPIC DE-ROOFING OF LIVER CYSTS COMBINED WITH CHOLECYSTECTOMY

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Introduction: Performing combined procedures using laparoscopic single-incision technique has become popular in the recent past. We report our recent experience in performing single-incision laparoscopic de-roofing of liver cyst combined with cholecystectomy in two patients.

Method: Both patients underwent laparoscopic single-incision surgery using a 1.5cm trans-umbilical incision. Pneumoperitoneum was created using a self-constructed

'glove-port' and an 'X-small Alexis wound protector'. Calots triangle dissected, cystic artery and cystic duct was identified and divided. Gall-bladder was then used to retract the liver. De-roofing of the liver cysts was done using laparoscopic 'LigaSure™-Covidien'. Hemostasis of the cyst edge done using intra-corporeal Prolene 4-0. Both gall-bladder and cysts delivered using a self-constructed plastic-bag.

Results: Two female patients with age 58 and 82. Both patients presented with epigastric discomfort after food. The older patient had no significant comorbidities while the other patient had history of ischemic heart disease and varicose veins.

Both patients had normal liver function tests pre-operatively and an initial ultra-sound scan showed gall-stones and multiple liver cysts. Further assessment with CT scan showed multiple simple liver cysts with largest of 3.2x2.9x2cm in segment-6 in the younger patient while largest of 14x12x11cm in segment-5/8 in the older patient.

Operative time was 84mins for the younger patient and 97mins for the older patient with large cysts. Histology for both patients revealed benign liver cysts and chronic cholecystitis. Both patients discharged on post-operative day-1 and had no pain on discharge. Reviewed in the clinic 1 and 4 weeks post-operatively and had no complications and no pain.

Conclusions: Combined procedure for de-roofing of liver cysts and cholecystectomy using single-incision laparoscopic technique feasible and can be safely performed in a day-surgery setting. Further detailed clinical studies may be required for further assessment of these combined procedures.

EPL-06

LAPAROSCOPIC LEFT LATERAL SECTIONECTOMY WITH LAPAROSCOPIC RESOLUTION OF LEFT SUPRAHEPATIC VEIN INJURY

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Introduction: Laparoscopic liver surgery has evolved over the last two decades. Advancements in surgical technology, surgical technique, and postoperative care have aided in lifting barriers to laparoscopic liver resection (LLR).

Method: This video showed a laparoscopic liver resection due to intrahepatic stones in a patient with multiples episodes of cholangitis. In the video we also showed a vascular accident with the left suprahepatic vein that it was fixed by laparoscopy.

Results: The surgery was done in 65 minutes, and the patient was discharged on post operative day 2. Pathology showed a benign biliary stenosis.

Conclusions: Laparoscopic liver resection in centers with experienced in laparoscopic surgery and liver surgery are safe.

EPL-07

LAPAROSCOPIC LEFT HEPATECTOMY WITH CUSA AND HARMONIC SCALPEL

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The development and increasing availability of laparoscopic versions of the so-called 'energy devices' for vessel sealing and division has been a boon to laparoscopic surgeons worldwide. Liver resection in particular has been aided by the improved performance and evolving ergonomics of these devices. However, there remains great benefit to be derived from the use of the laparoscopic version of the Cavitron Ultrasonic Surgical Aspirator, or 'CUSA', for many years, the workhorse of open liver resection. Herein, we describe our technique of parenchymal division during major hepatectomy, for which we employ the combined benefits of the CUSA and the Harmonic Scalpel. During a formal left hepatectomy, we demonstrate the precise parenchymal dissection made possible by the laparoscopic CUSA. We also demonstrate how the use of the Harmonic Scalpel in tandem with the laparoscopic CUSA can facilitate efficient parenchymal transection by avoiding unnecessary clip application which can be slow and may affect the use of laparoscopic staplers. We propose that this technique of liver resection is safe, efficient and precise.

EPL-08

LEFT HEPATECTOMY TOTALLY LAPAROSCOPIC SURGERY WITH OCCLUSION AND SELECTIVE SECTION LEFT PORTAL AND LEFT AND MEDIUM SUPRAHEPATIC PEDICLE. STANDARDIZATION OF SURGICAL TECHNIQUE

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Introduction: Woman, 65 years old, underwent surgery for breast carcinoma that during the following presents a liver injury of 4 cm, located at segment IVa, between the left and middle suprahepatic vein. The CT scan, PET and puncture were performed, and they reported of injury compatible with cholangiocarcinoma periferic.

Method: We have performed 1064 hepatic resections in our unit, of which 134 were performed laparoscopically. Of the latter, there were 6 left hepatectomies in which we do control extraglissoniano of the left and medium suprahepatic vascular pedicle.

Results: She operates through totally laparoscopic technique, performing intraoperative ultrasound confirming the existence of a single lesion located between the left and middle suprahepatic veins. By totally laparoscopic surgery is performed left hepatic artery and left portal vein dissection that sectioning between Hemolocks. Dissection the middle and left suprahepatic pedicle, which are sectioned with vascular EndoGIA