

establish pneumoperitoneum. A 12-mm trocar was placed over the left lower quadrant for the camera. The other ports were inserted as the video presentation. Greater omentum adhesive to the parietal peritoneum was dissected off the abdominal wall using monopolar electrocautery. The robot was successfully docked after completing adhesiolysis. Robotic nephrectomy was later performed using en bloc hilar ligation and cystic decompression to facilitate perirenal dissection.

**RESULTS:** The operative time was 275 minutes, and estimated blood loss was 100 mL. There were no intraoperative or postoperative complications.

**CONCLUSIONS:** Despite limited working space for manipulating the polycystic kidney disease, robot-assisted renal surgery is technically feasible, even in patients with previous abdominal surgery. Cystic decompression provides an easier dissection for minimally invasive surgeons.

**SOURCE OF FUNDING:** None

#### VP09-03 OFF-CLAMP ROBOT ASSISTED PARTIAL NEPHRECTOMY IN SOLITARY KIDNEY

Rocco Papalia<sup>1</sup>, Mariaconsiglia Ferrero<sup>1,2</sup>, Salvatore Guaglianone<sup>1</sup>, Giuseppe Simone<sup>1</sup>, Riccardo Mastroianni<sup>2</sup>, Michele Gallucci<sup>1</sup>

<sup>1</sup>Regina Elena National Cancer Institute (Italy)

<sup>2</sup>University Campus Biomedico (Italy)

**INTRODUCTION AND OBJECTIVES:** Partial nephrectomy without hilar clamping avoids the detrimental effect of warm ischemia on renal function. We present here our technique of zero ischemia robot assisted partial nephrectomy (PN) in a patient with solitary kidney.

**METHODS:** The video shows off-clamp robotic PN in a patient with a 4.3 cm right renal tumor in solitary kidney.

**RESULTS:** Operative time was 90 minutes. Intraoperative blood loss was 200 ml. Pathologic evaluation revealed pT1b ccRCC with negative surgical margins.

**CONCLUSIONS:** In selected patients and in referral centers off-clamp robot assisted PN in solitary kidney is feasible and safe.

**SOURCE OF FUNDING:** None

#### VP09-04 RENAL RECONSTRUCTION FOR T1B TUMORS AFTER PARTIAL NEPHRECTOMY

Clinton D Bahler<sup>1</sup>, Neil B Patel<sup>1</sup>, Chandru P Sundaram<sup>1</sup>

<sup>1</sup>Indiana University School of Medicine (United States)

**INTRODUCTION AND OBJECTIVES:** This video contains two patients with T1b tumors to illustrate different methods of reconstruction based on tumor location after robotic partial nephrectomy.

**METHODS:** The first patient was a 52-year-old female who was found to have a 4 cm right renal mass in the hilar region of the right kidney. The second patient was a 70-year-old male who was found to have a 6.4 cm exophytic mass in the lower pole of the right kidney. A single layer renorrhaphy was used in the first case and a two layer renorrhaphy with selective clamping performed in the second case.

**RESULTS:** Both surgeries and their post-operative courses were uncomplicated with the first patient being discharged on postoperative day 3 and the second on postoperative day 2.

**CONCLUSIONS:** For large hilar tumors a two-layer renorrhaphy may not be required but meticulous closure of the collecting system and control of divided blood vessels is required. A two-layer renorrhaphy was performed in the second patient. In our experience, the superficial renorrhaphy could devascularize cortical tissue and adversely impact renal function.

**SOURCE OF FUNDING:** None

#### VP09-05 ROBOT-ASSISTED LAPAROSCOPIC PARTIAL NEPHRECTOMY WITH SELECTIVE ARTERIAL CLAMPING

Kwun Chung Cheng<sup>1</sup>, Wai Kit Ma<sup>1</sup>, Hok Leung Tsu<sup>1</sup>, Kwan Lun Ho<sup>1</sup>, Ming Kwong Yiu<sup>1</sup>

<sup>1</sup>Queen Mary Hospital (Hong Kong)

**INTRODUCTION AND OBJECTIVES:** Minimising renal ischaemia is a major challenge in doing robot-assisted partial nephrectomy (RaPN). Zero ischaemia by selective arterial clamping and pharmacologically induced hypotension is increasingly popularised worldwide. The technical difficulties, however, render this technique to be limited in high volume tertiary centres only. We would like to illustrate one case using selective arterial clamping in RaPN.

**METHODS:** A 54-year-old man with good past health, presented with a 2.5 cm left mid pole renal mass incidentally found on ultrasound. Contrast CT scan was performed and vascular anatomy of the kidney and tumour was carefully examined. Following mobilisation of left kidney, Gerota's fascia was dissected to expose the renal capsule. Intraoperative ultrasound was done to identify the tumour. By hilar dissection and selective arterial clamping of an arterial branch with bulldog clamp, the tumour and a margin of parenchyma surrounding the tissue were made ischaemic. After tumour dissection, barbed sutures (V-Loc™) were used to repair the renal parenchyma in continuous manner, which were reinforced by polymer locking clips (Hem-o-lok).

**RESULTS:** Operation time was 4 hours 26 minutes. Estimated blood loss was 200 ml. Postoperative patient recovered uneventfully and his renal function remained stable with serum creatinine at 104 umol/L. Pathology was clear cell renal cell carcinoma, pT1a and Fuhrman grade 3. Margin was clear.

**CONCLUSIONS:** Selective arterial clamping is a technically challenging procedure. With careful preoperative planning and more experiences in robotic surgery, it can be safely performed with satisfactory early postoperative outcomes.

**SOURCE OF FUNDING:** No funding received

#### VP09-06 ROBOTIC ASSISTED PARTIAL NEPHRECTOMY IN A SOLITARY RENAL REMNANT

Aryeh Keehn<sup>1</sup>, Richard Maiman<sup>1</sup>, Jacob Taylor<sup>1</sup>, Reza Ghavamian<sup>1</sup>

<sup>1</sup>Albert Einstein College of Medicine (United States)

**INTRODUCTION AND OBJECTIVES:** Nephron sparing surgery is the gold standard for addressing small renal masses. We attempted a partial nephrectomy in a patient with a solitary renal remnant.

**METHODS:** An 64 year old female with a past medical history of hypertension was found to have bi-lateral large renal masses on CT scan in 2008. She underwent a staged right sided radical nephrectomy followed by an open left partial nephrectomy. After