

performed using 3-0 barbed continuous suture over a 6/26 double J stent. Perinephric fat was wrapped around the anastomotic site.

**RESULTS:** The operating time was 105 minutes. Blood loss was about 70 ml. Postoperative recovery was uneventful. Followup nephrostogram revealed a patent anastomosis with good drainage into the bladder.

**CONCLUSIONS:** Though ureterocalicostomy is a technically demanding procedure, use of robotic assistance allows the surgeon to perform the reconstruction precisely.

### VS17-06 ROBOTIC ASSISTED LAPAROSCOPIC ANATROPHIC NEPHROLITHOTOMY: FIRST CASE REPORT

Rene Sotelo, Golena Fernández, Oswaldo Carmona, Rafael Clavijo, Robert De Andrade, Roberto Garza, Carmen Rodriguez

*Instituto Médico la Floresta, Centro de Cirugía Robótica y de Invasión Mínima CIMI, Caracas, Venezuela*

**OBJECTIVE:** To present the first robotic-assisted approach to anatrophic nephrolithotomy, using the same early unclamping and controlled hypotension, with the objective of improving collecting system exploration.

**METHODS:** Robotic-assisted laparoscopic anatrophic nephrolithotomy was performed in one patient with complex staghorn calculi.

**RESULTS:** The procedure was completed with robotic assistance. The operative time was 180 minutes and the warm ischemia time was 26 minutes. The estimated blood loss was 1600 ml. The patient received 1 unit of packed red blood cells. The hospital stay was 4 days. No intraoperative or postoperative complications occurred during the first month. A residual 1 cm stone was identified. Right renal uptake (Tc99-DTPA) decreased 10% in the first postoperative month.

**CONCLUSIONS:** Robotic assisted laparoscopic anatrophic nephrolithotomy avoids the morbidity of an open flank incision, while achieving acceptable stone-free rates. Operative time and warm ischemia are similar to the laparoscopic approach; however, robotic assistance improves the calyceal exploration due to endowrist instruments.

This minimally invasive technique should be considered for complex stones that would necessitate multiple renal access tracks and secondary procedures.

Robotic-assisted laparoscopic anatrophic nephrolithotomy is feasible in highly selected patients.

Longer follow-up and a larger number of patients is required to confirm the advantages of this procedure and to compare it prospectively with PNL.

### VS17-07 LAPAROSCOPIC MANAGEMENT OF COMPLICATIONS DURING RENAL SURGERY

Victor Teixeira Dubeux, José Alves Milfont, Rodrigo Frota, Lucilio Medeiros, Gustavo Peçanha

*Urotech - Instituto de Urologia do Rio de Janeiro*

**OBJECTIVE:** Complications during laparoscopic procedures are very common, and their management usually requires conversion to open standard surgery. We present a video with some complications during laparoscopic renal surgery that were solved laparoscopically.

**METHODS:** The video shows different cases with complications that occurred during laparoscopic renal surgeries, such as colon perforation, soon recognized and repaired, intense bleeding from a gonadic right vein that were controlled laparoscopically. The

other two cases show an aortic bleeding repair with sutures, an ureteral transection during a partial nephrectomy followed by the repair of the defect, and finally, the ligation of a left renal artery during a right nephrectomy, with the removal of the clip laparoscopically and the correct ligation of the left renal artery.

**RESULTS:** All the cases were solved laparoscopically with safety and the patients did well after the procedures.

**CONCLUSIONS:** Per operative complications during laparoscopic renal surgery may be corrected laparoscopically.

### VS17-08 MANAGEMENT OF RENAL VEIN INJURY IN LAPAROSCOPIC RADICAL NEPHRECTOMY

Ataru Sazawa<sup>1</sup>, Takashige Takashige<sup>2</sup>, Takahiko Mitsui<sup>2</sup>, Takeya Kitta<sup>2</sup>, Satoru Maruyama<sup>2</sup>, Soshu Sato<sup>3</sup>, Kunihiko Tsuchiya<sup>2</sup>, Nobuo Shinohara<sup>2</sup>, Katsuya Nonomura<sup>2</sup>

*<sup>1</sup>Department of Urology, Hokkaido P.W.F.A.C Obihiro-Kosei General Hospital, Obihiro, Japan, <sup>2</sup>Department of Renal and Genitourinary Surgery, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, <sup>3</sup>Department of Urology, Ebetsu City Hospital, Ebetsu, Japan*

**OBJECTIVE:** Major vascular injuries during laparoscopic surgery are rare but potentially life-threatening. Management of vascular injuries during laparoscopic procedure is critical. There are some procedures against vena cava injury, such as compression of injury, suture of the puncture wound, and conversion to an open surgical technique. We retrospectively examined our management during renal vein injury in laparoscopic radical nephrectomy.

**METHODS:** There were three cases with renal vein injury during laparoscopic radical nephrectomy. Two cases were right renal vein. Approach of two cases was retroperitoneal. In all cases, surgeons were resident, and renal vein was injured after clamping renal artery.

**RESULTS:** The reason of renal vein injury would be inadequate handling of Hem-o-Lock and insufficient mobilization of kidney and renal artery. After injury, compression of injury site, traction of kidney, change of surgeon, transient sealing of puncture wound by Endo clip, and grasp of the puncture wound by forceps were useful. None of the patients need blood transfusion and open conversion.

**CONCLUSIONS:** Although polite surgical technique is needed to avoid renal vein injury, it is possible to recover from its injury by laparoscopic procedure.

### VS17-09 A TECHNIQUE OF CLAMPLESS ROBOTICALLY-ASSISTED HEMINEPHRECTOMY AND RESECTION FOR COMPLEX ECTOPIC MEGAURETER

Granville L Lloyd<sup>1</sup>, Guan Wu<sup>2</sup>, Hani Rashid<sup>2</sup>

*<sup>1</sup>Department of Urology, University of Wisconsin, Madison, Wisconsin, USA, <sup>2</sup>Department of Urology, University of Rochester, Rochester, New York, USA*

**OBJECTIVE:**

**METHODS:**

**RESULTS:**

**CONCLUSIONS:**