

an assistant, most but not all procedures can be performed without an assistant.

### The University of Chicago experience with pediatric robotic-assisted laparoscopic augmentation-ileocystoplasty and Mitrofanoff appendicovesicostomy (RALIMA)

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**INTRODUCTION:** To the best of our knowledge, we present the first series of complete intracorporeal robotic-assisted laparoscopic augmentation-ileocystoplasty and Mitrofanoff-appendicovesicostomy (RALIMA) in a pediatric population.

**METHODS:** From February to July 2008, 5 patients with spina bifida and neurogenic bladder were selected for RALIMA by a single surgeon. All had constipation, day and night-time incontinence, with recurrent urinary tract infection (UTI), and failed attempts at anticholinergic therapy and clean intermittent catheterization. Urodynamics showed all had low-capacity bladders with poor compliance and high leak point pressures. Preoperative bowel preparation was not performed. Mean follow-up was 6 months.

**RESULTS:** One patient required conversion to open ileal augmentation due to kyphoscoliosis, adhesions, and failure to progress, while another underwent augmentation ileocystoplasty without appendicovesicostomy. Of the patients who had robotic augmentation ileocystoplasty, average age was 9.75 years (range, 8–11 years). Average operative time was 8.5 hours (range, 6–11 hours). There were no intraoperative complications. Postoperatively, patients required oral analgesia for 24 to 36 hours, were started on liquid diet after 7.5 hours (range, 6–10 hours), on regular diet after 24 hours (range, 12–36 hours), and were discharged home within 6 days. Postoperatively, all patients demonstrated no leak on cystogram, and catheterized per appendicovesicostomy (3 patients) or urethra (1 patient). All patients now have day and night-time continence without UTIs and bladder capacity between 250 and 450 mL.

**CONCLUSIONS:** While longer follow-up is necessary to see if these results are durable, this series demonstrates that RALIMA is a safe, feasible, and effective procedure in the short-term with the possible added benefits of shorter recovery time and analgesia.

### Lymphatic-sparing laparoscopic varicocelectomy: Safe and effective

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**INTRODUCTION:** Complications associated with open and laparoscopic varicocelectomy techniques include varicocele recurrence and hydrocele formation. We determined the effectiveness and safety of lymphatic-sparing laparoscopic varicocelectomy in the pediatric population.

**METHODS:** We evaluated all children less than 18 years of age undergoing laparoscopic varicocelectomy for grade 3 varicoceles. A 3-port technique is used with 1 infraumbilical port and 1 port in the midclavicular line bilaterally at the level of the umbilicus. An incision is made in the posterior peritoneum over the spermatic cord vessels. The vessels are dissected away from the lymphatics with minimal manipulation, and then the artery/veins are double ligated with clips and transected. Patients are monitored postoperatively for varicocele recurrence and hydrocele formation. A successful varicocelectomy is defined as no varicoceles palpable in the standing position with Valsalva.

**RESULTS:** Forty-eight boys between the ages of 10.0 and 17.6 years of age underwent laparoscopic varicocelectomy. No patient needed to be converted to an open varicocelectomy. All patients underwent successful varicocelectomy. No postoperative complications occurred, including varicocele recurrence, hydrocele formation, infection, or testicular atrophy after at least 6 months of follow-up.

**CONCLUSIONS:** Lymphatic-sparing laparoscopic varicocelectomy is a safe and effective technique to treat varicoceles. Postoperative varicocele recurrence and hydrocele formation were not noted.

### Early results of robotic lymphadenectomy for renal cell carcinoma

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**INTRODUCTION:** Laparoscopic nephrectomy for renal cell carcinoma (RCC) has gained acceptance in the urologic community, but lymphadenectomy is not uniformly performed during open or laparoscopic nephrectomy. With the advent of targeted medical therapy for metastatic renal cell carcinoma, lymphadenectomy for identification of micrometastatic disease may merit reconsideration. We sought to determine whether lymphadenectomy can be performed at the time of laparoscopic nephrectomy with the aid of robotic instrumentation and present the first such case series.

**METHODS:** Robot-assisted laparoscopic radical nephrectomy was performed in 13 patients and robotic partial nephrectomy in 1. For right-sided renal tumors, the lymphadenectomy included paracaval, retrocaval, and interaortocaval nodes, and left-sided tumors included interaortocaval and paraaortic nodes.

**RESULTS:** Mean tumor size was 6.4 cm (2.2–18 cm), with all revealing RCC on pathology. Six tumors were invasive with 4 T3a tumors and 2 T3b. Mean operative time was 199 minutes (120–350 minutes). A mean of 9.9 lymph nodes was obtained (range, 4–24 nodes) with all negative for metastatic disease. Estimated blood loss was 68 mL (10–200 mL). Three ports were used in 9 of 14 cases. No patient required intravenous narcotics postoperatively, and 12 of 14 patients were discharged on the first postoperative day with the other 2 on the second day. One patient had a cautery injury to the small bowel due to a defect in the insulation on a robotic instrument, but there were no vascular injuries or other complications of the lymphadenectomy.