laparoscopic radical prostatectomy (spRALRP) and standard robot-assisted laparoscopic radical prostatectomy (RALRP) at our large-volume institution.

METHODS: We retrospectively identified patients who underwent spRALRP at our institution from December 2018 – September 2019 and collected 30-day outcomes data after surgery, with complications categorized by the Clavien-Dindo system. The comparison cohort consisted of patients who underwent standard RALRP at our institution and were followed prospectively in an unrelated trial (NCT03006562, PREVENTER). Pelvic lymph node dissection (PLND) was performed at the discretion of the attending surgeon. Post-operative outcomes were compared using Wilcoxon rank-sum and Fisher's exact test as appropriate.

RESULTS: A total of 24 men underwent spRALRP and 376 underwent standard RALRP with 328 (82.0%) overall receiving a PLND. There was no difference in median operative time (177 vs. 180 min, $p = 0.9$), length of stay (1 vs. 1 day, $p = 0.2$), or number of lymph nodes removed (4.5 vs 9, $p = 0.1$) between spRALRP and RALRP. Median estimated intraoperative blood loss was lower for spRALRP compared to RALRP (100mL vs. 150mL, $p = 0.02$). There was no difference in pathological Gleason score distribution between groups ($p = 0.4$).The spRALRP cohort had a total of 4 (16.7%) Clavien (I-V) complications which was consistent with the standard RALRP cohort (17.3%, $p=1.0$). Only 1 (4.2%) major (Clavien $\geq$ III) complication, a delayed rectourethral fistula requiring diverting colostomy and correction of the vesicourethral anastomosis, occurred in the spRALRP cohort which was comparable to the rate of major complications for standard RALRP (3.7%, $p = 0.6$). There was no difference in maximum patient-reported pain scores in the 24 hours prior to discharge (5.5 vs. 6, $p = 0.2$) or in the last pain score at discharge (2 vs. 3, $p = 0.2$) between groups.

CONCLUSIONS: Based on an early experience with spRALRP at a high-volume center, there appears to be equivalent outcomes and complication rates compared to standard RALRP. Future studies may compare the cost equivalence and patient-centered outcomes between approaches.

Source of Funding: None.

MP04-11

SINGLE PORT VS. MULTIPORT ROBOTIC SURGERY FOR THE UPPER URINARY TRACT: SHORT TERM PERI-OPERATIVE OUTCOME ANALYSIS

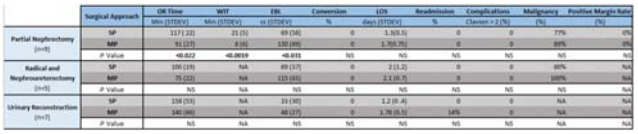
Michael Stifelman, Bethany Desroches, Hackensack, NJ; Juhi Deolankar, Newark, NJ; Gregory Lovallo, Ravi Munver, Mutahar Ahmed, Hackensack, NJ*

INTRODUCTION AND OBJECTIVE: In June 2018, the FDA approved the Intuitive single port (SP) robot for urologic procedures. In January 2019, Hackensack University Medical Center acquired this technology and trained 5 high volume robotic urologic surgeons. This study is designed to evaluate the peri-operative outcomes of SP compared to those of the multiport (MP) robot for procedures of the upper urinary tract to determine the feasibility, safety, and reproducibility of single port robotic surgery.

METHODS: Using a prospective IRB database, we compared patients undergoing SP robotic nephrectomy, partial nephrectomy, pyeloplasty, and buccal mucosa ureteroplasty to a 1:1 matched cohort of patients utilizing a MP approach. We used age, sex, BMI, and when appropriate nephrometry score, to create our case matched cohort. Peri-operative outcomes measured included operative time (OR time), warm ischemia time (WIT), estimated blood loss (EBL), Clavien grade greater than 2 complications, positive margin rate, and rate of readmission within 30 days. Due to the 1:1 matching between SP and MP, we treated each analysis as paired data. For the OR comparisons, we performed paired t-tests. For the EBL and LOS comparisons, we performed Wilcoxon signed rank t-tests since these outcomes did not meet normality criteria.

RESULTS: Please see Table 1 for a summary of our results. We found statistically significant differences only in the partial nephrectomy cohort – which included SP having longer OR time (117 vs 91; $p<0.022$) and WIT (21 vs 8; $p< 0.002$). EBL was higher for the MP group (130 vs 69; $p <0.031$).

CONCLUSIONS: We compared the peri-operative outcomes of 21 patients undergoing upper urinary tract SP robotic surgery to a 1:1 matched MP cohort. Significant differences were noted in OR time and WIT, which favored the MP group, whereas there was higher EBL in the MP group. These differences may be attributed to the fact that two patients' surgeries in the MP group were performed off clamp. We conclude that SP surgery is safe, reproducible, and offers minimal to no increase in intra- and peri-operative risks compared to MP robotic surgery for upper urinary tract procedures.



	Surgical Approach	OR Time Min (STDEV)	WIT Min (STDEV)	EBL cc (STDEV)	Conversion %	LOS days (STDEV)	Readmission %	Complications Clavien > 2 (%)	Malignancy (%)	Positive Margin Rate (%)
Partial Nephrectomy [n=9]	SP	117 (22)	21 (5)	69 (58)	0	1.3(0.5)	0	0	77%	0%
	MP	91 (27)	8 (6)	130 (69)	0	1.7(0.75)	0	0	89%	0%
	P Value	<0.022	<0.0019	<0.031	NS	NS	NS	NS	NS	NS
Radical and Nephroureterectomy [n=5]	SP	100 (19)	NA	69 (37)	0	2 (1.2)	0	0	80%	NA
	MP	75 (22)	NA	115 (65)	0	2.1 (0.7)	0	0	100%	NA
	P Value	NS	NA	NS	NS	NS	NS	NS	NS	NA
Urinary Reconstruction [n=7]	SP	158 (53)	NA	33 (30)	0	1.2 (0.4)	0	0	NA	NA
	MP	140 (49)	NA	48 (27)	0	1.78 (0.1)	14%	0	NA	NA
	P Value	NS	NA	NS	NS	NS	NS	NS	NA	NA

Source of Funding: None

MP04-12

PREDICTORS OF EARLY RE-INTERVENTION AFTER URETERAL TUMORSTENT INSERTION FOR OBSTRUCTIVE UROPATHY

Alexander Gu, Lisa Oyo, Cédric Poyet, Thomas Hermanns, Daniel Schmid, Tullio Sulser, Daniel Eberli, Etienne Xavier Keller, Zurich, Switzerland*

INTRODUCTION AND OBJECTIVE: Ureteral Tumorstents are known for their robustness and can be used for long-term therapy of obstructive uropathy. Generally, manufacturers recommend a maximal dwell time of 6 months. Aim of this study was to evaluate predictors of early re-intervention after first-time Tumorstent insertion.

METHODS: We analyzed all patients treated with a Tumorstent (Bard® angiomed UROSOFT) between 2010 and 2018. Patients with planned temporary dwell time (e.g. protective insertion before abdominal surgery) were excluded. Primary endpoint was time to re-intervention (Tumorstent exchange or nephrostomy tube insertion) after first-time Tumorstent insertion. Elective Tumorstent exchange was usually undertaken within 1 month prior to maximal dwell time (i.e. between 5 to 6 months after insertion). Therefore, only the first 5 months after insertion were considered for analysis of early re-intervention. Proportions were compared with Chi Square tests. Time-dependent variables were evaluated with Kaplan-Meier curves, log-rank tests and Cox-regression analyses.

RESULTS: A total of 129 patients were available for analysis. Thereof, 78 (60%) were male and 60 (47%) were female. Mean age was 64.7 years. Left, right or bilateral disease was present in 60 (47%), 54 (42%) and 24 (19%) cases, respectively. Prior to first-time Tumorstent insertion, 54 (42%) and 12 (9%) patients had a polymeric ureteral stents or nephrostomy tubes in place, respectively, while 72 (56%) cases had no prior upper urinary tract drainage. No significant association was found between Tumorstent diameter and length ($p=0.29$) (65% 7F/32cm, 16% 7F/28cm, 12% 6F/32cm and 7% 6F/28cm). Re-intervention-free survival at 1, 2, 3, 4 and 5 months was 90%, 83%, 76%, 64% and 55%, respectively. Of all pre-operative and peri-operative parameters, we found shorter Tumorstent length, right-sided or bilateral disease and absence of prior upper urinary drainage as significant predictors of early re-intervention (Figure 1-3) (all $p < 0.05$).

CONCLUSIONS: Early re-intervention occurs in up to 45% of all patients after first-time Tumorstent insertion for obstructive uropathy. Shorter Tumorstent length, right-sided and bilateral disease, as well as absence of prior upper urinary tract drainage seem to be predictors of early re-intervention. Patients and physicians must be aware that