METHODS: Patients undergoing open radical cystectomy (ORC) and robotic assisted radical cystectomy (RARC) and urinary diversion with ERAS for bladder urethral carcinoma from May 2012 to December 2016 were studied. Surgical and clinical outcomes within 90 days after surgery were compared between ORC and RARC, including LOS, readmission and major complication rates (Clavien-Dindo grade ≥3). Multivariable logistic regression modeling was used to determine factors that predict extended LOS (>4 days), readmission and major complications.

RESULTS: A total of 345 and 143 patients underwent ORC and RARC, respectively. The ORC group had a greater proportion of continent urinary diversion (71.9 vs 40.6%, p<0.001), shorter operative time (5.4 vs 7.3 h, p<0.001), higher estimated blood loss (500 vs 200 ml, p<0.001), and higher intraoperative and postoperative transfusion rates (20.9 vs 9.1%, p<0.002 and 20 vs 11.9%, p=0.04, respectively). Median LOS was 4 days for ORC (IQR 4-6 days) and 6 days for RARC (IQR 4-7 days) (p<0.001). There was no significant difference in readmission rates or major complication rates within 30 and 90 days after surgery. Patients with extended LOS had older age (73 vs 68, p<0.001), more comorbidities (p<0.001), longer operative time (6.3 vs 5.6 h, p<0.001), higher intraoperative and postoperative transfusion rate (24 vs 9.5%, p<0.001 and 22.5 vs 11.8%, p=0.002, respectively). Patients who were readmitted within 90 days had older age (73 vs 70, p=0.007), greater proportion of diabetes (32.7 vs 17.5%, p=0.001), and higher transfusion rate (42 vs 24.5%, p<0.001). Patients having major complications had older age (73 vs 70, p<0.01), lower baseline of hemoglobin (11.5 vs 12.2 g/dL, p=0.05) and hematocrit (36 vs 36.8, p<0.04), and higher transfusion rates (41.2 vs 27.5%, p=0.01). Multivariable logistic regression analysis showed that surgical approach was not an independent factor predictive of extended LOS, readmission or major complications.

CONCLUSIONS: In the framework of an ERAS protocol, surgical approach was not a determinate factor of clinical outcomes of RC. The evidence-based ERAS protocol is the key factor for optimal patient recovery.

Source of Funding: None

MP47-12 COMPARISON OF PERIOPERATIVE OUTCOMES, FUNCTIONAL OUTCOMES, AND COMPLICATIONS FOR ROBOT ASSISTED RADICAL CYSTECTOMY WITH ORTHOTOPIC NEobladder in Elderly vs. Young Patients
Avinash Chenam*, William Chu, Nora Ruel, Patrick Kilday, Juzar Jammagnerwalla, Clayton Lau, Jonathan Yamzon, Ali Zhumkhawala, Bertram Yuh, Kevin Chan, Duarte, CA

INTRODUCTION AND OBJECTIVES: Robot assisted radical cystectomy (RARC) with orthotopic neobladder (ON) has been well described. However, questions remain regarding this practice for elderly patients. We evaluated differences in perioperative outcomes, functional outcomes, complication rates and readmission rates between elderly patients (EP)(70 years and older) and younger patients (YP)(under 70 years).

METHODS: Retrospective data was obtained from RARCs with ON from 2003 to 2016. Clinicopathologic and outcome variables were compared using the chi-square and wilcoxon rank-sum tests. Perioperative outcomes included operative time, extent of lymph node dissection, open conversion rate, estimated blood loss, transfusion rate, time to return of bowel function, and length of stay (LOS). Functional outcomes included rates of diurnal and nocturnal continence, daily use of pads (yes/no and number), need for incontinence treatment, and need for intermittent catheterization (CIC). Readmission and complication rates were compared between the two groups.

RESULTS: 159 RARC with ON (114 in the YP vs. 45 in the EP) were performed. Younger patients were more likely to receive neo-adjuvant chemotherapy (39.5% in YP vs. 22.2% EP, p=0.4). No difference existed in ASA class or clinical stage between groups. Operative time was similar at 7.6 h for YP vs. 7.4 h for EP. There was no difference in EBL, transfusion rate (overall 27.7%), time to return of bowel function, or LOS (median 8 d, p=0.8). Diurnal and nocturnal continence rates were higher for YP vs. EP, however these failed to reach statistical significance (diurnal rate: 86.8% YP vs. 77.8% EP, p=0.3) (nocturnal rate: 76.3% YP vs. 66.7% EP, p=0.4). Similarly, there was no difference in use or number of pads. Conversely, hypercontinence as measured by need for CIC was higher in the YP compared to EP group at 17.5% vs. 8.9% respectively but also was not statistically significant (p=0.09). There was no difference in complication or readmission rates between groups. Overall 30 day complication rate was 69.8% with 25.2% rate of a major complication, while 90 day total and major rates were 73.6% and 31.4% respectively. Overall readmission rates were 25.2% and 35.2% at 30 and 90 days respectively.

CONCLUSIONS: In our patients who underwent RARC with ON, there was no difference in perioperative or functional outcomes based on age, though there was a trend toward improved continence in younger patients. Complication and readmission rates were also similar between the two groups.

Source of Funding: None

MP47-13 ROBOT-ASSISTED RADICAL CYSTECTOMY IN OCTOGENARIANS AND THE EFFECT OF AN ENHANCED RECOVERY PATHWAY ON PERI-OPERATIVE INDICES
Avinash Chenam*, Justin Erntage, Nora Ruel, Patrick Kilday, Juzar Jammagnerwalla, Clayton Lau, Jonathan Yamzon, Ali Zhumkhawala, Bertram Yuh, Kevin Chan, Duarte, CA

INTRODUCTION AND OBJECTIVES: The management of aggressive bladder cancer poses a unique challenge due to the often-advanced age at diagnosis. This is becoming more common with the increasing longevity of the general population and incidence of bladder cancer as a whole. Robot-assistance may offer decreased peri-operative morbidity in comparison to open surgery, especially important in the elderly. Further, enhanced recovery protocols can offer added benefits on operative outcomes in this population. Thus, we present our experience with robot-assisted radical cystectomy in a strictly octogenarian population and the effect of the City of Hope Cystectomy Pathway on peri-operative indices.

METHODS: We identified all patients who were >80 years at the time of their robot-assisted radical cystectomy performed at our institution between October 2003 to present. Demographic and peri-operative data were collected in an IRB-approved database. Patients were then stratified by whether or not they were subject to the City of Hope Cystectomy Pathway that was instituted in April 2014 and these cohorts were compared.

RESULTS: A total of 87 octogenarians underwent robot-assisted radical cystectomy during our study period. 20 of these were subject to the pathway. The total mean age was 83.9 years, and the vast majority were unhealthy with 91.9% of the cohort having an ASA score of 3 or higher. Most patients (85.1%) underwent ileal conduit diversions. Median estimated blood loss was 250 cc. 63.2% of patients required blood transfusions. There were 3 (3.4%) open conversions. Median length of stay was 10 days. 31.0% of patients experienced major complications at 90 days. The 30 and 90-day mortality rate was 3.4% and 12.6%, respectively. The 30 and 90-day readmission rate was 32.2% and 42.5%, respectively. Pathway patients had a higher ASA and lower estimated blood loss. Use of the pathway reduced length of stay by 3 days. There was no difference observed in the rate of complications, peri-operative mortality or early readmission.
CONCLUSIONS: Robot-assisted radical cystectomy is safe and feasible in octogenarians with an acceptable peri-operative morbidity profile that can potentially be an improvement when compared to open surgery. The City of Hope cystectomy pathway was not associated with a reduction in the rates of early complications, mortality or readmissions but a shorter length of stay was observed. Larger randomized, prospective trials are needed to further investigate our findings.

Source of Funding: None

**MP47-14**

THE UTILITY OF THE ACS NSQIP SURGICAL RISK CALCULATOR IN PATIENTS UNDERGOING RADICAL CYSTECTOMY: OPEN AND ROBOTIC TECHNIQUES


**WITHDRAWN**

**MP47-15**

MULTICENTRIC COMPARISON OF SURGICAL OUTCOMES OBTAINED AFTER OPEN RADICAL CYSTECTOMY AND ROBOT-ASSISTED LAPAROSCOPIC RADICAL CYSTECTOMY FOR MUSCLE-INVASIVE BLADDER CANCER

Louis Lenfant*, Jérôme Parra, Paris, France; Gregory Verhoest, Rennes, France; Alexandre Masson-Lecomte, Alexandre De la Taille, Créteil, France; Mathieu Roumiguie, Toulouse, France; Lionel Taksin, Antony, France; Guillaume Ploussard, Toulouse, France; Morgan Roupret, Paris, France

**INTRODUCTION AND OBJECTIVES:** To compare the outcomes obtained after open and robotic-assisted radical cystectomy (RARC) for muscle invasive bladder cancer (MIBC).

**METHODS:** All clinical and operative data were prospectively collected from six French academic centres over the last 6 years. We included MIBC patients who underwent either an open or a RARC. The following data were considered: age, BMI, TNM, operative time, length of hospital stay, complications (Clavien-Dindo), pathologic assessment and oncologic outcomes. Pre-, intra-, and postoperative data were compared between both groups.

**RESULTS:** Overall 251 Patients were included in the study with a median age of 67.3 years. Of them, 133 underwent RARC (51.3%) and 118 underwent an ORC (48.7%). The median follow-up for both groups was 30 months (IQR 19-50). The following criteria were significantly lower in the RARC group: median intraoperative Estimated blood loss (400 [IQR 300;600] vs 700 [IQR 400;1100] mL; p < 0.001), blood transfusion (17% [IQR 40%;60%] vs 30% [IQR 20%;40%]; p < 0.0001), and median length of stay (LOS) (13 [IQR 12;22] days; p < 0.0001), major complications (= Clavien 3) (18% [IQR 20.45%] vs 30% [37.04%]; p=0.034). Two-year cancer specific survival rates mo were 74% and 87% (p=0.01) for ORC and RARC, respectively. In multivariate analysis, the two following criteria had a negative influence on recurrence: stage, surgical margins but nor the surgical approach.

**CONCLUSIONS:** RARC was feasible and the perioperative outcomes were promising compared to the open approach. However we lack a longer follow-up and a prospective design to make a strong statement regarding the oncological outcomes.

Source of Funding: none

**MP47-16**

ONE YEAR FOLLOW UP OF THE EFFICACY OF PHYSICAL PREHABILITATION IN RADICAL CYSTECTOMY PATHWAYS - SECONDARY RESULTS FROM A RANDOMIZED CONTROLLED TRIAL

Bente Thoft Jensen*, Michael Borre, Mette Borre, Ingrid Soendergaard, Jørgen Bjerggaard Jensen, Aarhus, Denmark

**INTRODUCTION AND OBJECTIVES:** Early results of prehabilitation in radical cystectomy (RC) highlights the impact preoperative conditioning has on enhancing functional recovery after RC. Exercise protocols represent the major component of the prehabilitation programs along with the oral supplements. The aim of this study was to investigate the efficacy of pre- and postoperative rehabilitation on physical and nutritional recovery when entering the survivorship phase.

**METHODS:** A parent RCT-study investigated the efficacy of a pre and postoperative rehabilitation in RC pathways (NCT01329107). The intension-to-treat-population was allocated to: intervention (nI) =50 and standard (nS) =57. Physiotherapists’ instructed the nI to a preoperative (PRE) home-based program consisting of muscle strength exercises and endurance training, the interaction between anabolic modulators: nutrient and physical exercises and a postoperative (PO) physio-assisted exercise program. All patients underwent physical and nutritional tests at; two weeks prior to surgery, the day before surgery, at discharge, five weeks, four and twelve months PO. Objective measures included leg extension power (physical capacity) and handgrip strength (proxy for nutritional status), oral nutritional intake PRE and PO and intravenous intake PO. Efficacy was expressed as the differences between treatment groups at time for surgery and during follow up

**RESULTS:** Compared to nS, the nI group demonstrated a significant improvement in muscle power of 19.3 watt/kg (p=0.006) at time of surgery followed by a significant fall at discharge of 19.7 watt/kg (p<0.01). No difference was found at five weeks PO, however the nI